

Welcome to NSF Day!



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What NSF Does

NSF Vision

Advance discovery, innovation, and education
beyond the frontiers of current knowledge

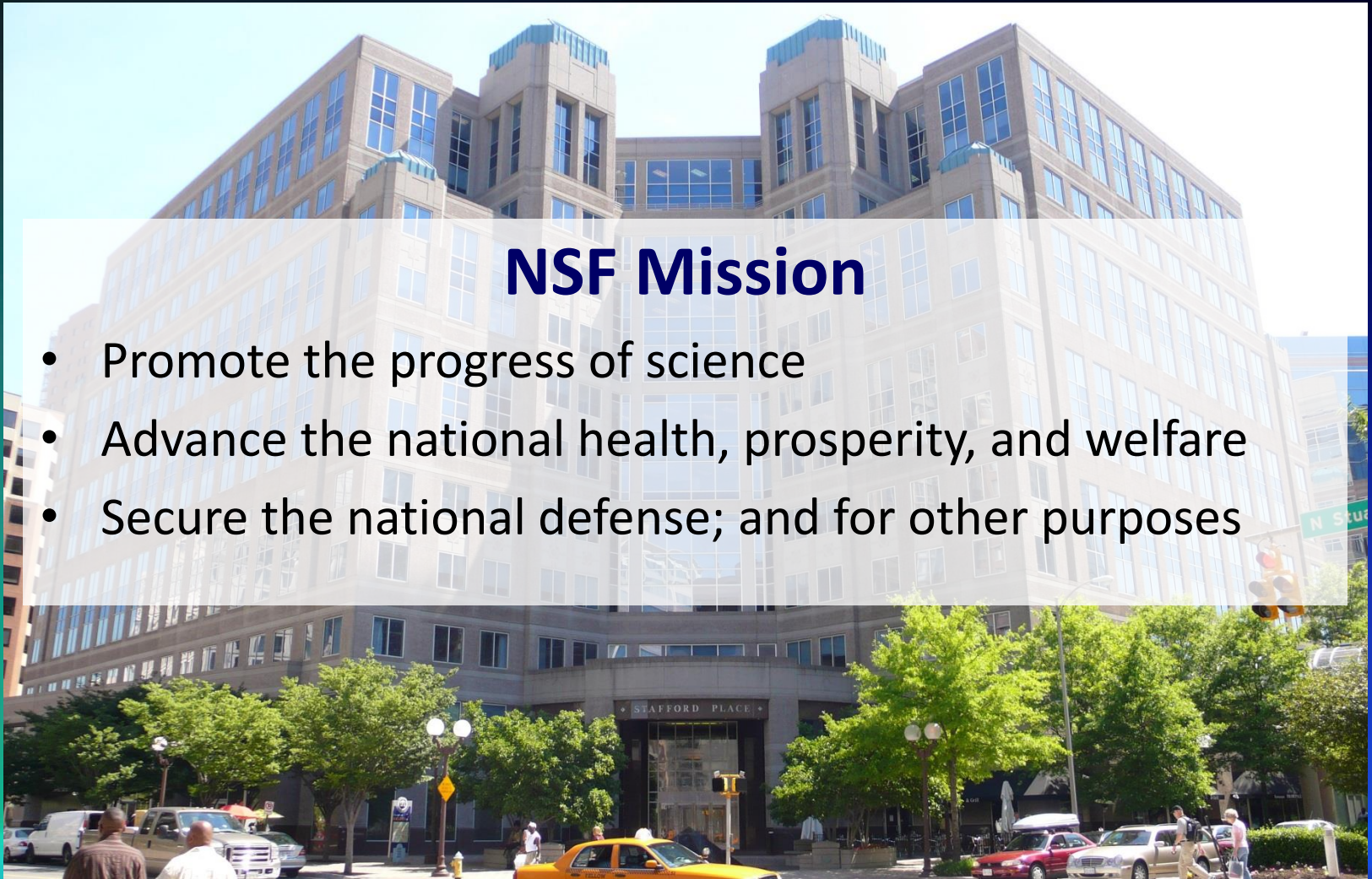
Empower future generations in
science and engineering



What NSF Does

NSF Mission

- Promote the progress of science
- Advance the national health, prosperity, and welfare
- Secure the national defense; and for other purposes



***NSF will relocate to Alexandria, VA in 2018**

NSF Core Values

Accountability for Public Benefit

Scientific Excellence

Organizational Excellence

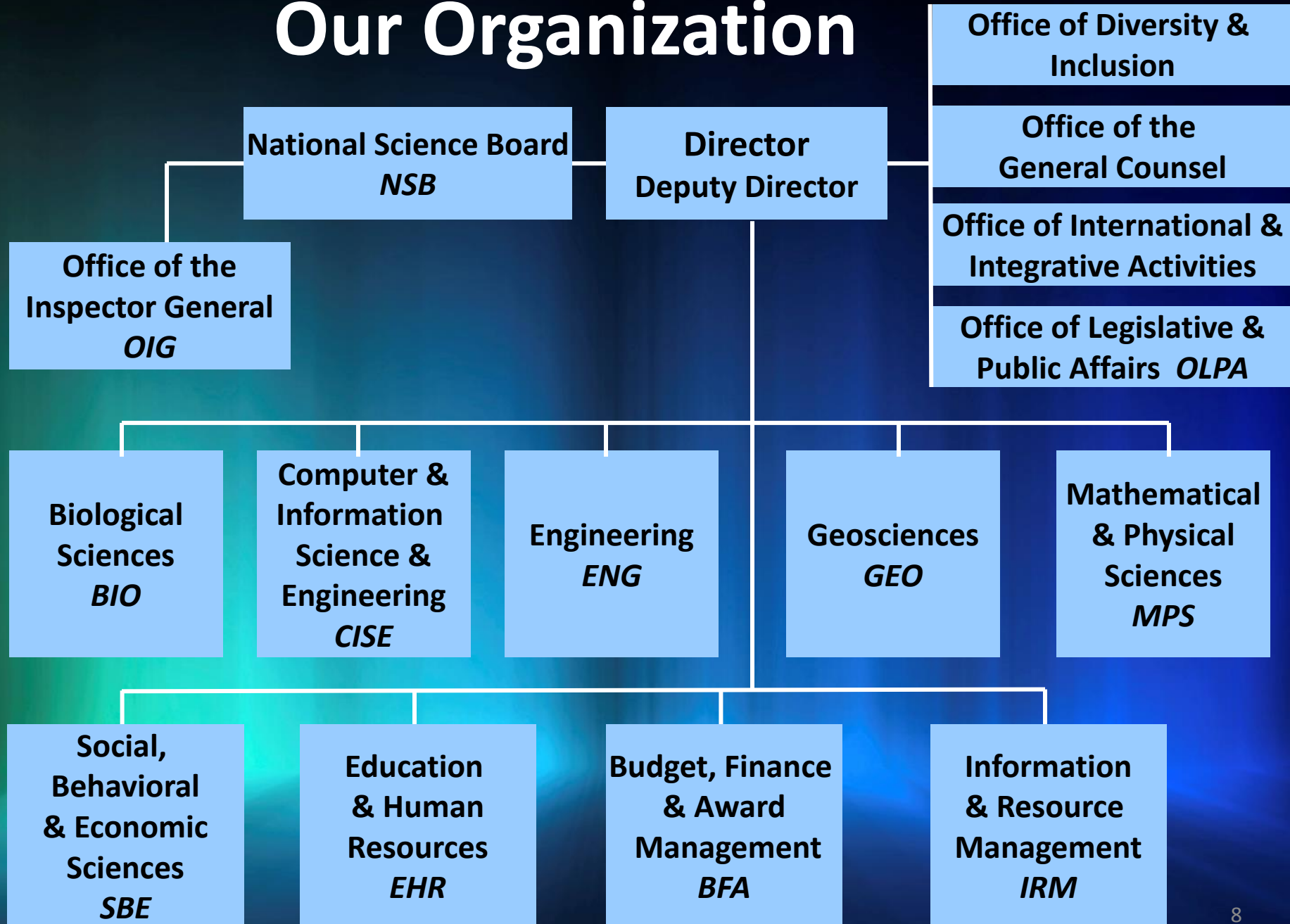
Learning

Inclusiveness

The NSF in a Nutshell

- Independent agency
- Co-lead by a Director and National Science Board
- Supports basic research & education
- Uses grant mechanism through competitive merit review
- Discipline-based structure
- Cross-disciplinary mechanisms
- Use of Rotators/IPAs
- Low overhead (~6%)
- Highly automated

Our Organization



NSF by the Numbers

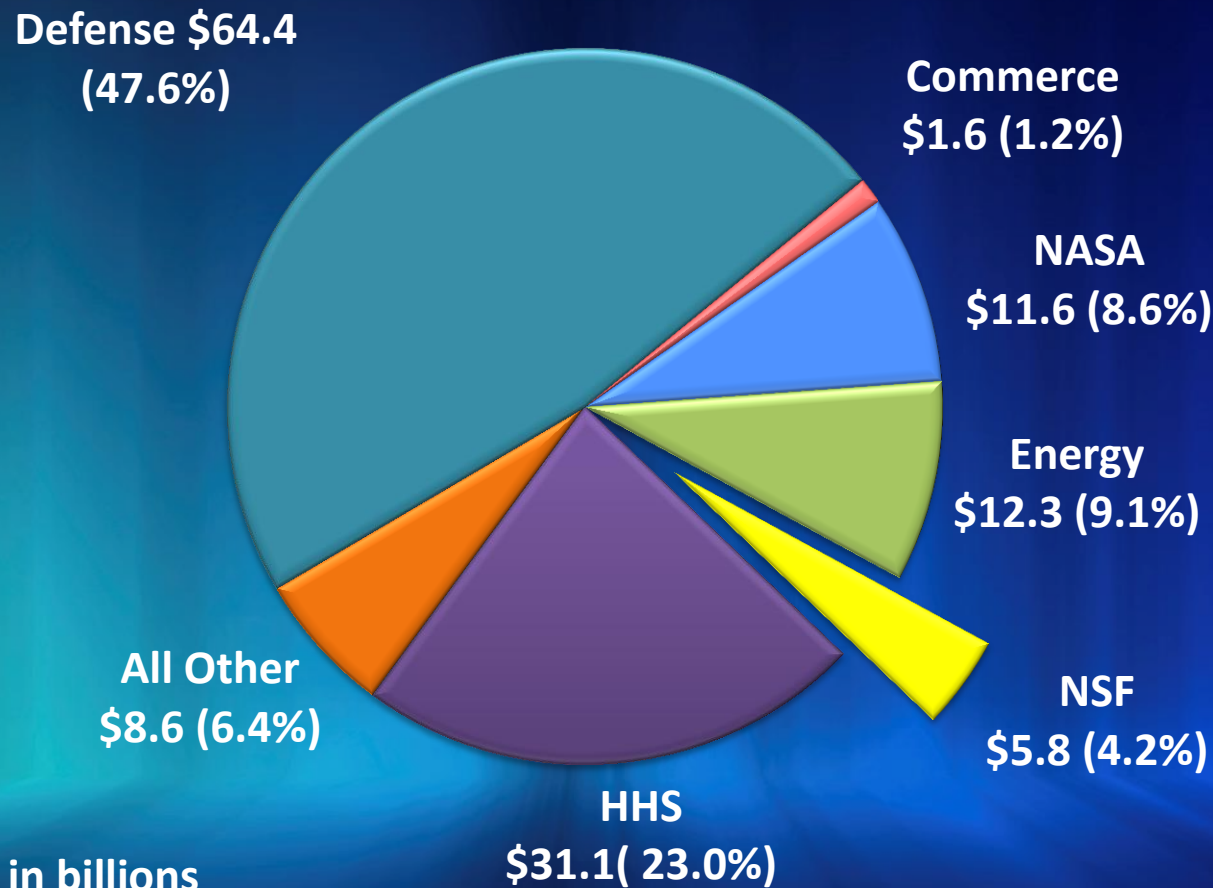
| | |
|---------------------------------|--|
| 1922 | Colleges, universities, and other institutions NSF funded |
| 10,800 | Competitive awards NSF funded |
| 47,800 | Students supported by NSF Graduate Research Fellowships (since 1952) |
| 50,000 | Proposals evaluated through competitive merit review |
| 233,000 | (Total) Reviews conducted |
| 299,000 | Individuals NSF directly supported (researchers, postdocs, trainees, teachers, and students) |
| \$6.9 billion | FY 2013 Budget Actuals |
| \$7.2 billion | FY 2014 Budget Actuals |
| Figures represent FY 13 actuals | |

NSF Budget: FY 2014 and FY 2015

| (dollars in millions) | | |
|--|-----------------|--------------------|
| | FY 2014 Plan | FY 2015 Request |
| Research & Related Activities (R&RA) | \$5,802 | \$5,807 |
| Education & Human Resources | 845 | 890 |
| Major Research Equipment & Facilities Construction | 200 | 201 |
| Agency Operations & Award Management (AOAM) | 306 | 338 |
| National Science Board | 4 | 4 |
| Office of Inspector General | 14 | 14 |
| Total, NSF | \$7,172 | \$7,255 |
| Opportunity, Growth, and Security Initiative | - | 552 |

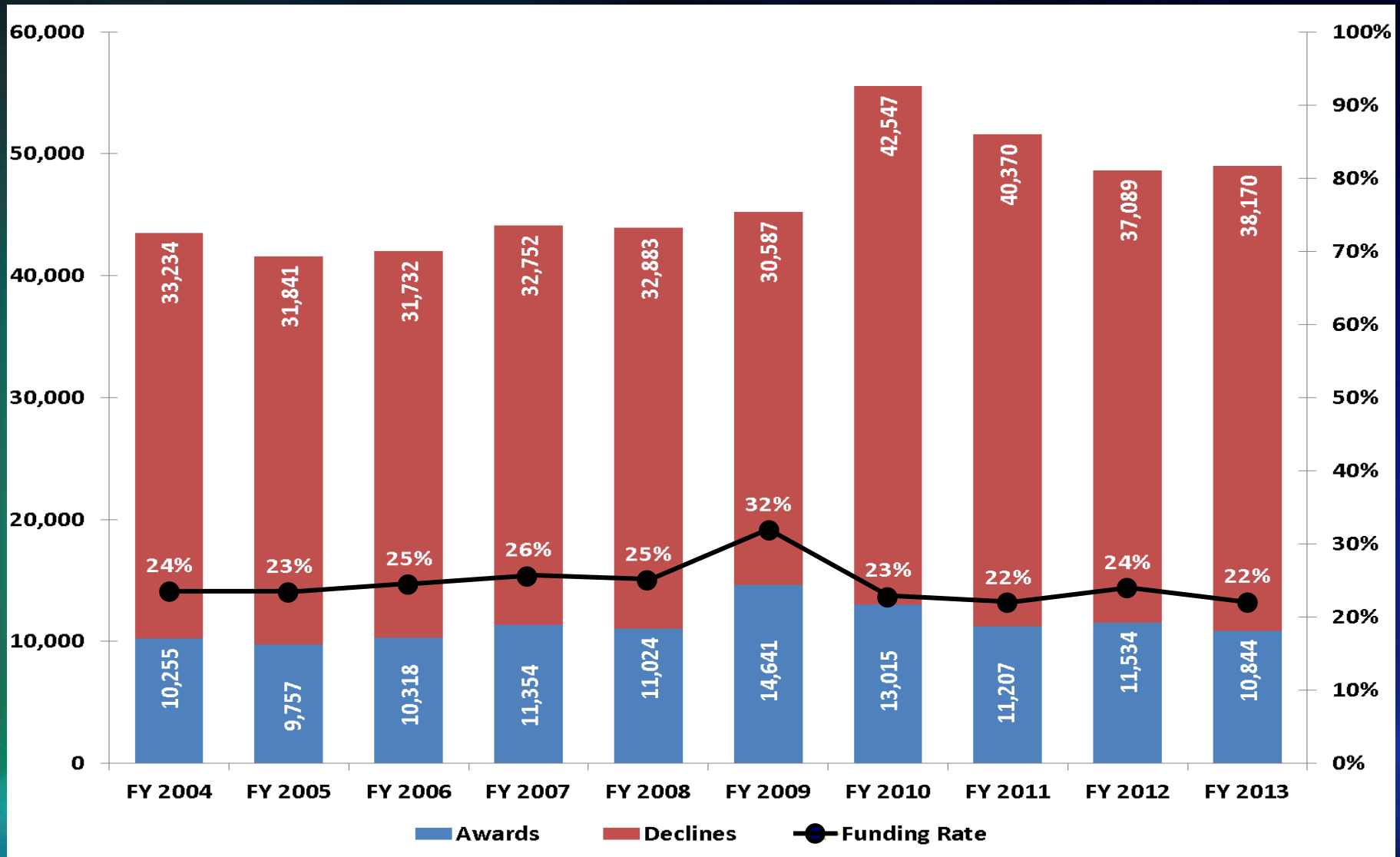
NSF in Perspective

2015 Total Federal R&D Budget for the United States (\$135.4 billion)



*Dollar Amounts in billions

NSF Competitive Awards, Declines & Funding Rates



NSF's Culture of Communication



NSF is Committed to Transparency and Accountability

Projects and the expenditure
of public funds must be
clearly described and
justified.

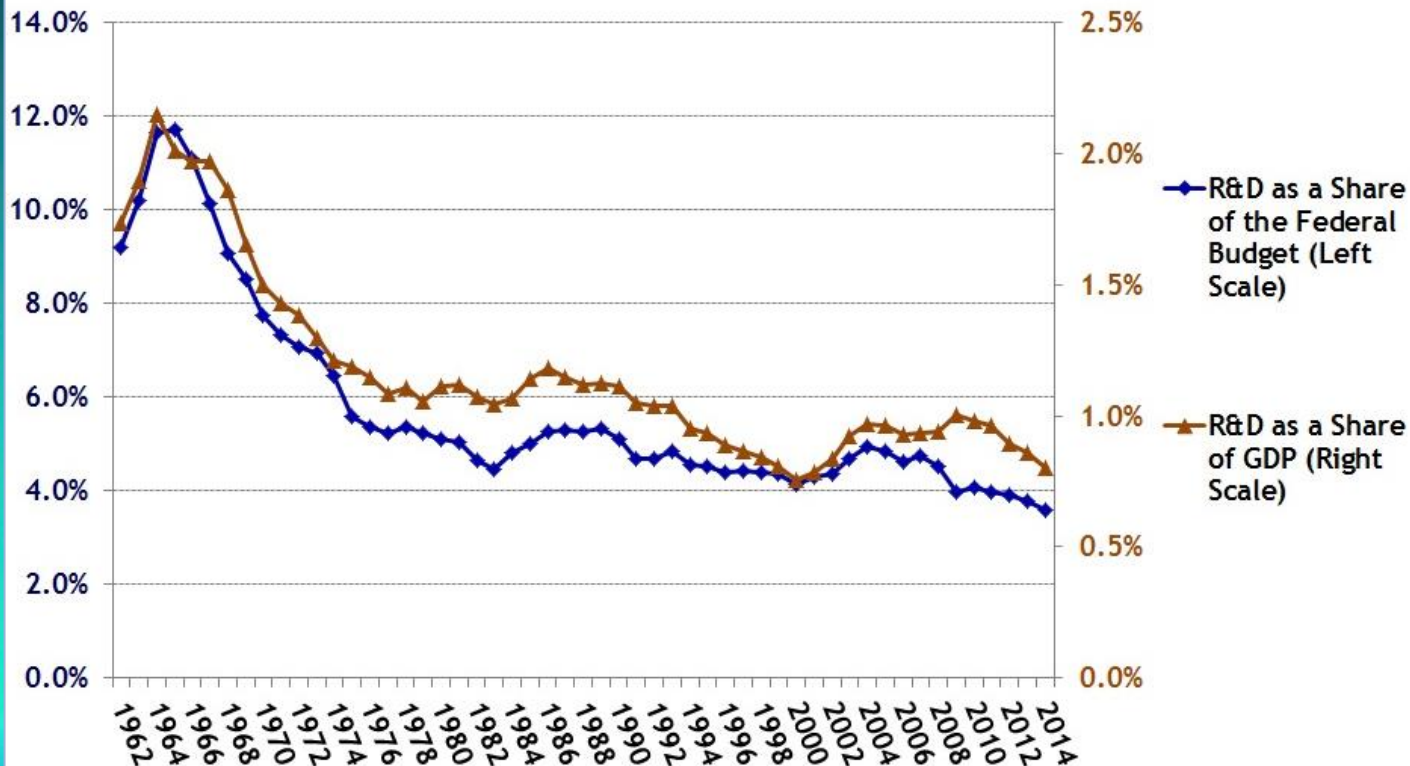


The Changing Budget Landscape

R&D as a % Federal Budget

Federal R&D in the Budget and the Economy

Outlays as share of total, 1962 - 2014



R&D as a % GDP

Source: *Budget of the United States Government, FY 2014*. FY 2013 data do not reflect sequestration. FY 2014 is the President's request.

© 2013 AAAS



Public Scrutiny of the NSF

Congressional debate over science funding draws fire from critics

Senate Moves to Limit NSF Spending on Political Science

Why is Our Government Attacking Science?

Rampant Waste Reported in NSF

Amendment Limiting
National Science Foundation
Research Funding Passes Senate

The Congressional War on the Social Sciences

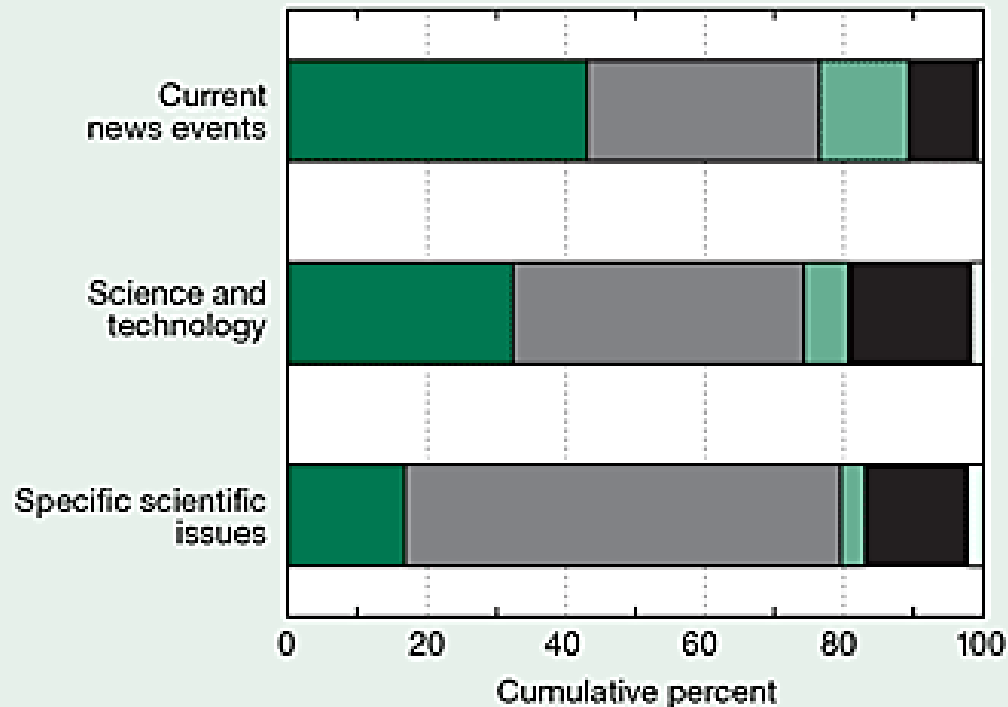
Coalition of Scientific Organizations Defend NSF Peer Review

Many Rival Nations Surge Past the U.S. in
Adding New Jobs

The Media Landscape

Primary source of information about current news events, science and technology, and specific scientific issues: 2012

Television Internet Newspapers All other Don't know



Source: Science & Engineering Indicators 2014

Society's Changing Needs



Natural hazards



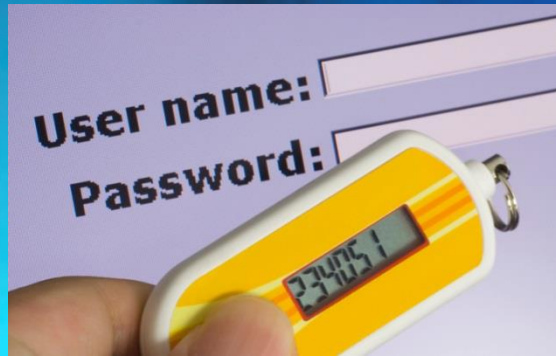
Climate change



Energy



Food and drug safety




Cybersecurity



Youth violence


NSF's Communication Strategy


Create a context and narrative for the general public
and for policy makers

HOME VIDEO U.S. WORLD POLITICS ENTERTAINMENT TECH


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WATCH LIVE: SENTENCING OF FORMER SAN DIEGO MAYOR B

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Climate Scientist Michael Mann Interview, Part 1
"New McCarthyism" targets climate scientists, say Mann.
09:28 | 07/07/2012

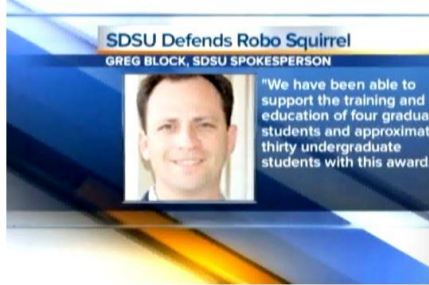




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Taxpayer-Funded 'Robo-squirrel' Makes Senator's 2012 'Wastebook'

Oct 17, 2012
by KEVIN DOLAK



SDSU Defends Robo Squirrel
GREG BLOCK, SDSU SPOKESPERSON

"We have been able to support the training and education of four graduate students and approximately thirty undergraduate students with this award."

Robo-Squirrel the Target of 'Wastebook' Spending

Next Video: DARPA's Four-L

San Diego State University's taxpayer-funded project to invent a "robo-squirrel" has been criticized as a boondoggle by an Oklahoma senator, but the school defends the grant that funded the project also helped support the education of 34 student

Researchers at SDSU used funds from a \$325,000 grant provided by the taxpayer National Science Foundation on the invention of a robotic squirrel used for research. Oklahoma Republican Senator Tom Coburn lambasted the project as a waste of taxpayer money, exemplifying what needs to be excised from government spending.

NSF Science & Engineering Messengers

From Oil Boom to Science Boom: Fueling North Dakota's Hi-Tech Economy

leave a comment >


This is a sample blog post composed for the June 25-26 'Science: Becoming the Messenger' workshop in Fargo, North Dakota.


If you read the news lately about North Dakota, you may get the impression that we're some sort of economic wonderland. The reason is that in comparison with the rest of the U.S., North Dakota has an extremely low unemployment rate: just 3.2 percent. That's the lowest in the nation, by a considerable margin. And much of it is thanks to an unfolding unconventional oil and gas boom here, which has generated a large number of jobs and considerable wealth.

Clearly, North Dakota has fared better than much of the rest of the country in weathering the Great Recession and keeping its citizens employed—at least in "old economy" industries like agriculture and fossil energy. But if you look forward to the future, we're not necessarily so well positioned. According to the Washington, D.C.-based Information Technology and Innovation Foundation, we rank 34th overall in the strength of our new economy sector. The economics of the 21st century will demand a much more tech savvy and advanced workforce, and plentiful jobs in hi tech industries—and what's more, oil booms by nature are cyclical, and there are reasons to think the current one will someday end. If we're going to continue to compete, those jobs need to be located and thriving right here in North Dakota.

So how do we ensure a future that's at least as prosperous as the present? North Dakota EPSCoR (Experimental Program to Stimulate Competitive Research) is doing its part by helping to spur innovation in sectors that you don't usually associate with a big oil state—fields such as clean energy, sustainable materials, and green chemistry. Right now, the program is nearing the completion of a 5 year, \$15 million grant that has focused on two areas in particular: Generating clean and renewable energy directly from the crops that grow so plentifully here in the Great Plains; and creating sustainable materials—including those produced through innovative "green chemistry" approaches, which use less water and leave less of an environmental mark. Looking forward, we're also pursuing a new grant to focus further on sustainable materials research, and no wonder. Already, this body of science is paying off significantly in terms of economic benefits for North Dakota.

Take our "SUNBITE" program—Sustainable Energy Research, Infrastructure, and Supporting Education—which is focused on converting oils from crops into fuels and chemicals, rather than relying on carbon intensive fossil sources. Over the course of our work here, 11 patents have been issued under this program.





Links
About
Meet Our Team

Recent Posts
Generation Innovation:
Priming the Science Education Pipeline in Alaska
From Oil Boom to Science Boom: Fueling North Dakota's Hi-Tech Economy

Twitter Updates
Error: Twitter did not respond. Please wait a few minutes and refresh this page.

Archives

When Should You Communicate?

Before, during and after your work is NSF funded, work with:

- Your NSF program officer
- Your institution's public information officer
- Broader communities
- NSF Office of Legislative and Public Affairs

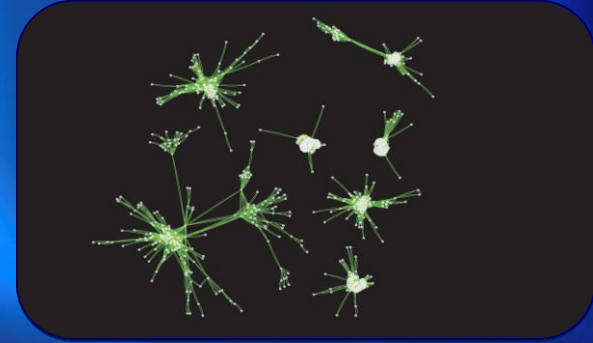
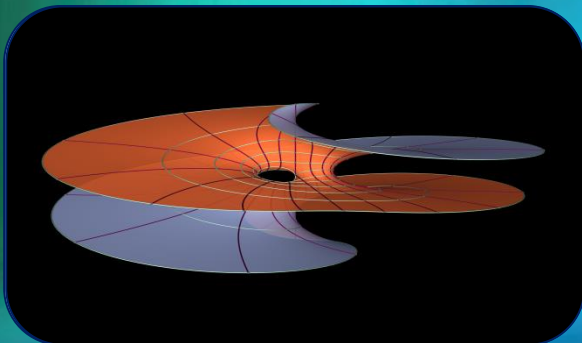
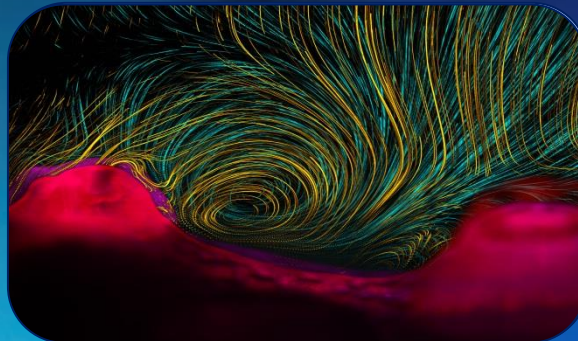


Failure to Communicate

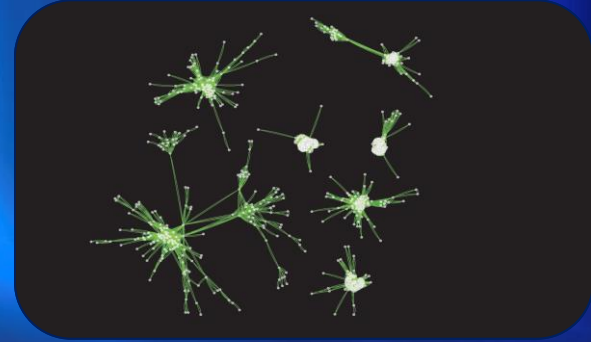
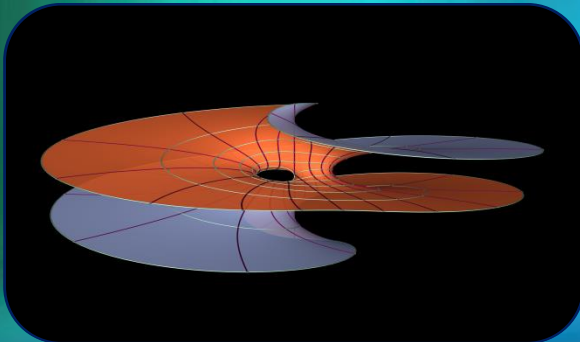
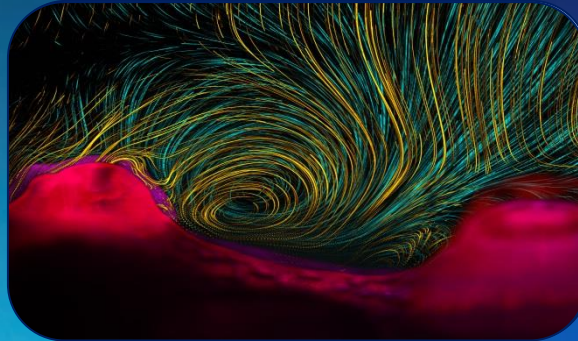


NSF's Organization

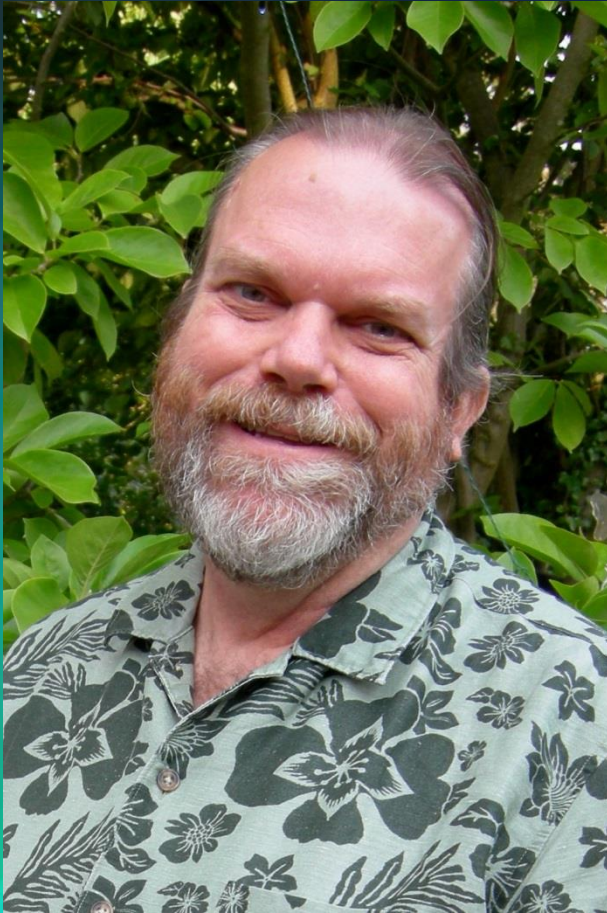
The NSF Directorates and Offices



The NSF Directorates and Offices



Biological Sciences (BIO)



George Gilchrist

Division of Environmental Biology

Ggilchrist@nsf.gov

- **Permanent Program Officer in the Division of Environmental Biology/Evolutionary Processes Cluster**
- **Technical Coordinator for the BEACON (Bio/computational Evolution in Action CONsortium) Science and Technology Center at Michigan State University**
- **Program Officer on Dimensions of Biodiversity**

Biological Sciences (BIO)

James Olds, Assistant Director
Jane Silverthorne, Deputy Assistant Director

**Emerging Frontiers
(EF)**

**Division of
Biological Infrastructure
(DBI)**

Scott Edwards, Division Director
James Deshler, Deputy Division Director

**Division of Molecular and Cellular
Biosciences
(MCB)**

Gregory Warr, Division Director
Theresa Good, Deputy Division Director

**Division of
Environmental Biology
(DEB)**

Alan Tessier, Acting Division Director
Maureen Kearney, Deputy Division Director

**Division of Integrative Organismal
Systems
(IOS)**

William Zamer, Division Director
Michelle Elekonich, Deputy Division Director

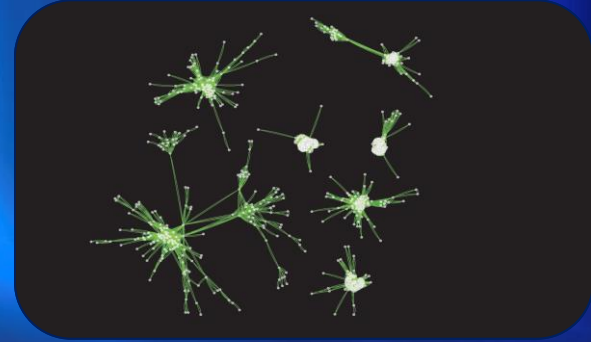
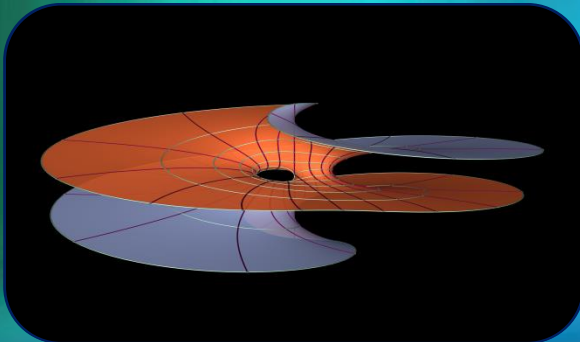
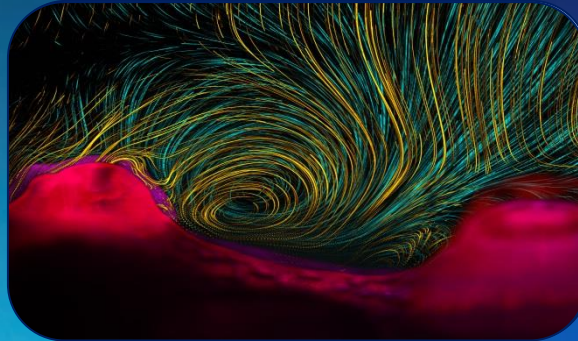
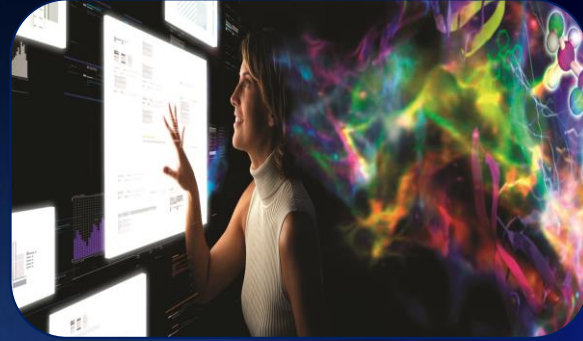
Biological Sciences (BIO)

Priorities

- PI-driven projects in all areas of Biological Research
- Brain Research through Advancing Innovative Neurotechnologies (BRAIN)
- National Ecological Observatory Network (NEON)
- Dimensions of Biodiversity



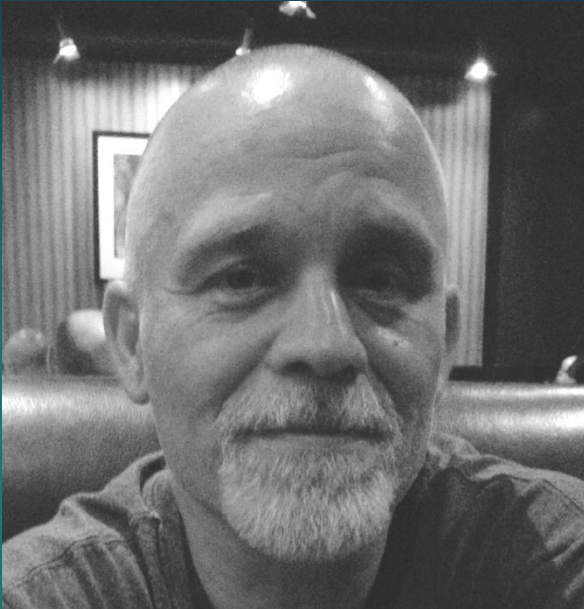
The NSF Directorates and Offices



Computer & Information Science & Engineering (CISE)

Tracy Kimbrel

Computing & Communication Foundations (CCF)
tkimbrel@nsf.gov



- **Lead program officer, Algorithms in the Field (AitF)**
CISE cross-division program
- **Lead program officer, Algorithmic Foundations (AF)**
CCF core program
- **Liaison and former program officer for Graduate Research Fellowship Program (GRFP)**

Computer & Information Science & Engineering (CISE)

James F. Kurose, Assistant Director
Suzanne C. Iacono, Deputy Assistant Director

Division of Advanced Cyberinfrastructure (ACI)

Irene M. Qualters, Division Director
Mark Suskin,
Deputy Division Director

Division of Computer and Network Systems (CNS)

Keith Marzullo, Division Director
Erwin P. Gianchandani,
Deputy Division Director

Division of Information and Intelligent Systems (IIS)

Lynne Parker, Division Director
Deborah F. Lockhart,
Deputy Division Director

Division of Computing and Communication Foundations (CCF)

S, Rao Kosaraju, Division Director
James J. Donlon,
Deputy Division Director

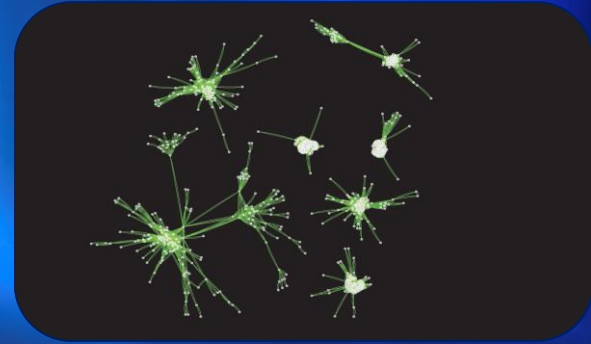
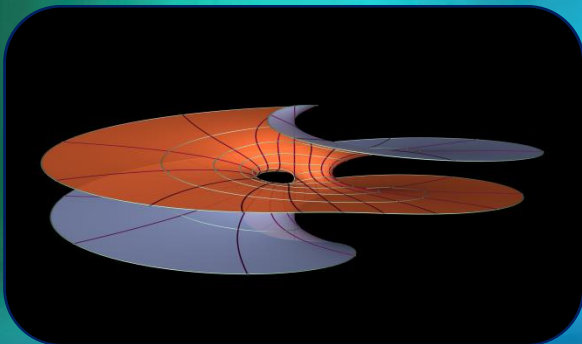
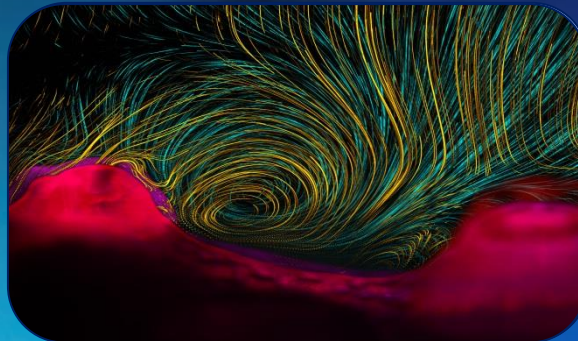
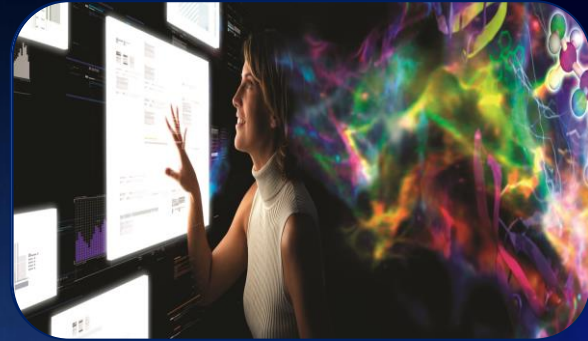
Computer & Information Science & Engineering (CISE)

Directorate Priorities

- Core research programs across computer science
- Cross-CS and cross-NSF programs (e.g., BRAIN, SaTC, NRI)
- CS education (cyberlearning)
- Building cyber infrastructure



The NSF Directorates and Offices



Education & Human Resources (EHR)



B. Jan Middendorf

Divisions of Graduate Education &
Human Resource Development
bjmidden@nsf.gov

- **Project director of the Project and Program Evaluation (PPE) program**
- **Serves as an expert on evaluation and management of the evaluation projects within NSF divisions.**
- **Co-chair of EHR Evaluation and Monitoring Work Group**
- **Funds Promoting Research and Innovative Methodologies for Evaluation (PRIME)**

Education & Human Resources (EHR)

Dr. Joan Ferrini-Mundy
Assistant Director

**Division of Graduate Education
(DGE)**

Valerie Wilson
(Acting) Division Director

**Division of Human Resource Development
(HRD)**

Jermelina Tupas
(Acting) Division Director

**Division of Research on Learning in Formal and
Informal Settings (DRL)**

Sylvia M. James
(Acting) Division Director

**Division of Undergraduate Education
(DUE)**

Susan R. Singer
Division Director

Education & Human Resources (EHR)

Learning and learning environments

Cognitive and non-cognitive foundations of STEM

Creative uses of formal and informal STEM learning

Broadening participation in STEM

Access to and success in high quality STEM education for underrepresented groups

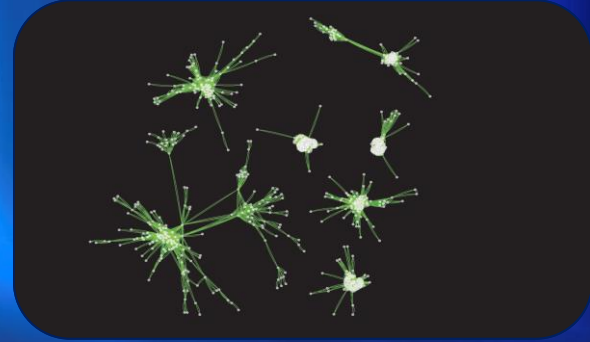
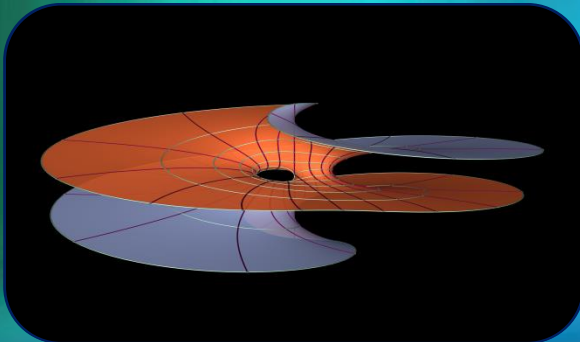
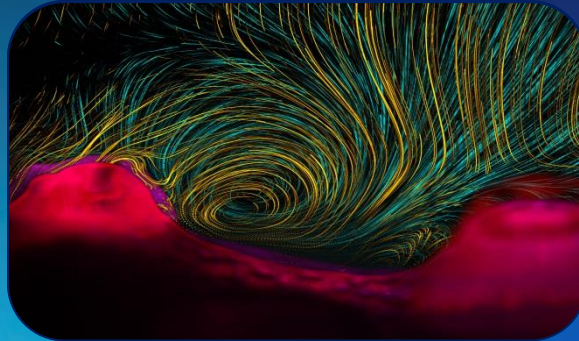
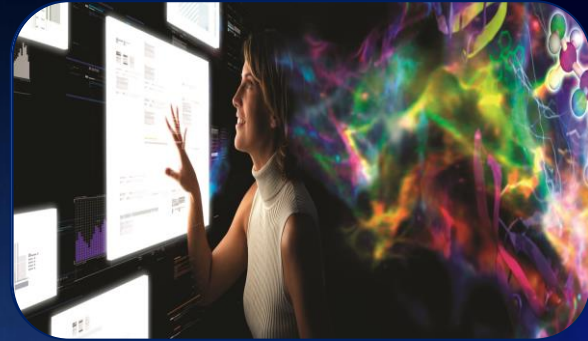
STEM professional workforce development

Capitalize on scientific advances

Address not yet imagined global,
social & economic challenges



The NSF Directorates and Offices

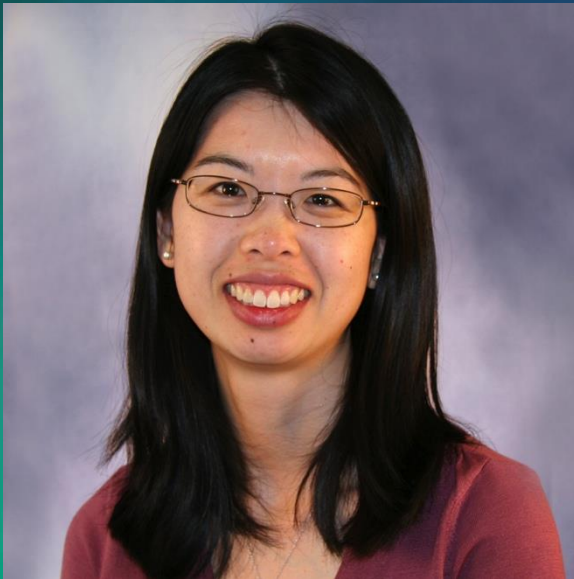


Engineering (ENG)

Amy Chan-Hilton

Engineering Education and Centers (ENG/EEC)

achanhil@nsf.gov



- Program director for ERCs, REU, Professional Formation of Engineers: Revolutionizing Engineering Departments and NUE programs
- Previously served as program director in the Division of Undergraduate Education, working in the IUSE: EHR, S-STEM, Noyce, TUES, STEP and WIDER programs
- Associate professor in Civil and Environmental Engineering at Florida State University

Engineering (ENG)

**Emerging Frontiers in
Research and Innovation
(EFRI)**

Sohi Rastegar

Innovation Corps

Babu DasGupta

Pramod Khargonekar, Assistant Director
Grace Wang, Deputy Assistant Director

**Senior Advisor for
Nanotechnology**

Mihail Roco

**Program Director for
Strategic Operations**

Cheryl Albus

**Program Director for
Evaluation & Assessment**

Alexandra Medina-Borja

**Engineering Education and Centers
(EEC)**

Don Millard, Division Director (Acting)

**Chemical, Bioengineering, Environmental,
and Transport Systems
(CBET)**

JoAnn Lighty, Division Director

**Civil, Mechanical, and Manufacturing
Innovation (CMMI)**

George Hazelrigg, Division Director

**Electrical, Communications, and Cyber
Systems
(ECCS)**

Samir El-Ghazaly, Division Director

**Industrial Innovation and Partnerships
(IIP)**

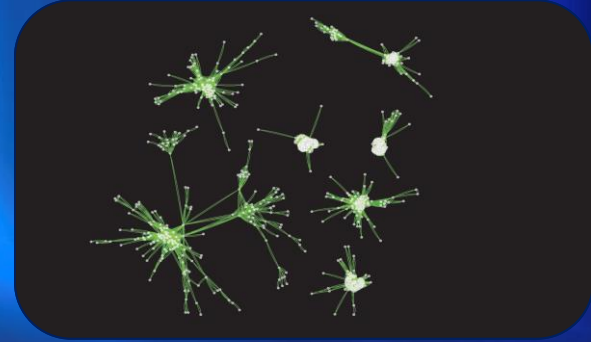
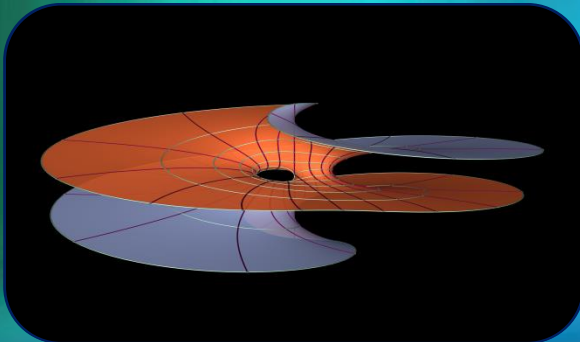
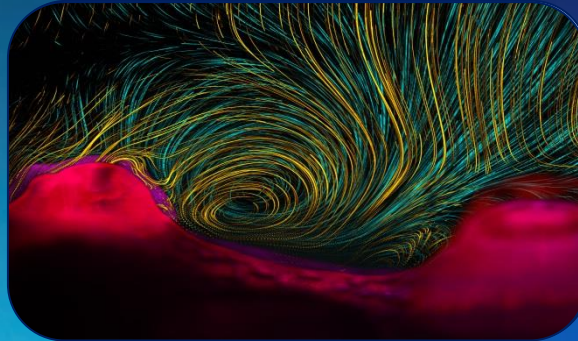
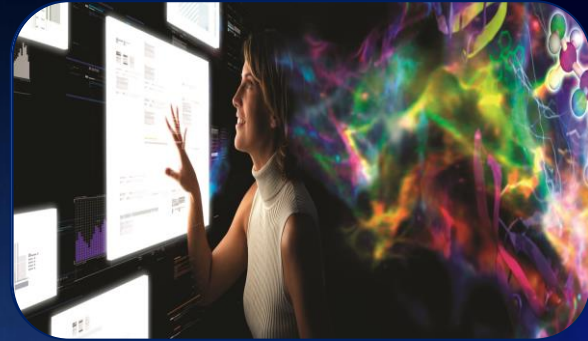
Barry Johnson, Division Director

ENG Initiatives and Priorities

Address National Interests

- INFEWS
- Risk and Resilience:
CRISP
- Urban Science
- Clean Energy Technology*
- Cyber-Enabled Materials, Manufacturing, and Smart Systems - Advanced Manufacturing*
- Optics and Photonics
- Understanding the Brain
- Education and Broadening Participation: INCLUDES
- Innovation Corps
- Emerging Frontiers in Research and Innovation
- Integrative Research Centers
- National Nanotechnology Initiative*
- Communications and Cyberinfrastructure

The NSF Directorates and Offices



Geosciences (GEO)

Eric DeWeaver

Division of
edeweave@nsf.gov



- Manages the Climate and Large-Scale Dynamics Program (CLD)
- Formerly at UW-Madison, postdoc in Seattle
- Research interests in the dynamics of atmospheric circulation, Arctic sea ice
- Worked on polar bear listing decision for USGS

Geosciences (GEO)

Dr. Roger Wakimoto, Assistant Director
Dr. Margaret Cavanaugh, Deputy Assistant Director

**Division of Atmospheric and
Geospace Sciences (AGS)**

Paul Shepson, Division Director

Division of Ocean Sciences (OCE)

Rick Murray, Division Director

Division of Polar Programs (PLR)

Kelly Falkner, Division Director

Division of Earth Sciences (EAR)

Carol Frost, Division Director

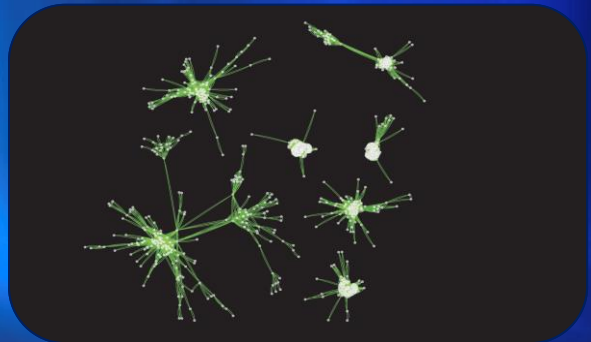
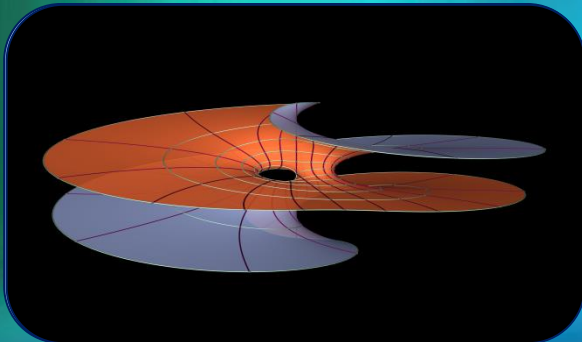
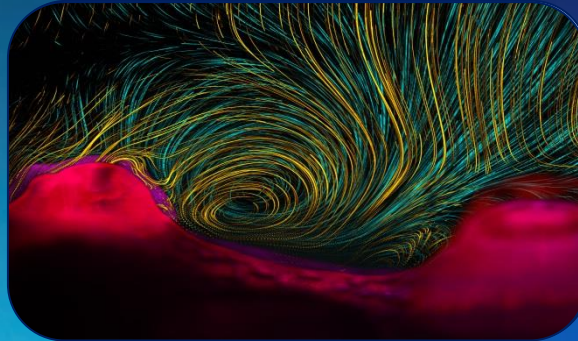
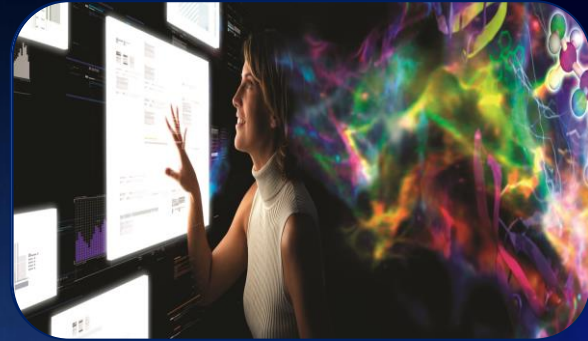
Geosciences (GEO)

Directorate Priorities

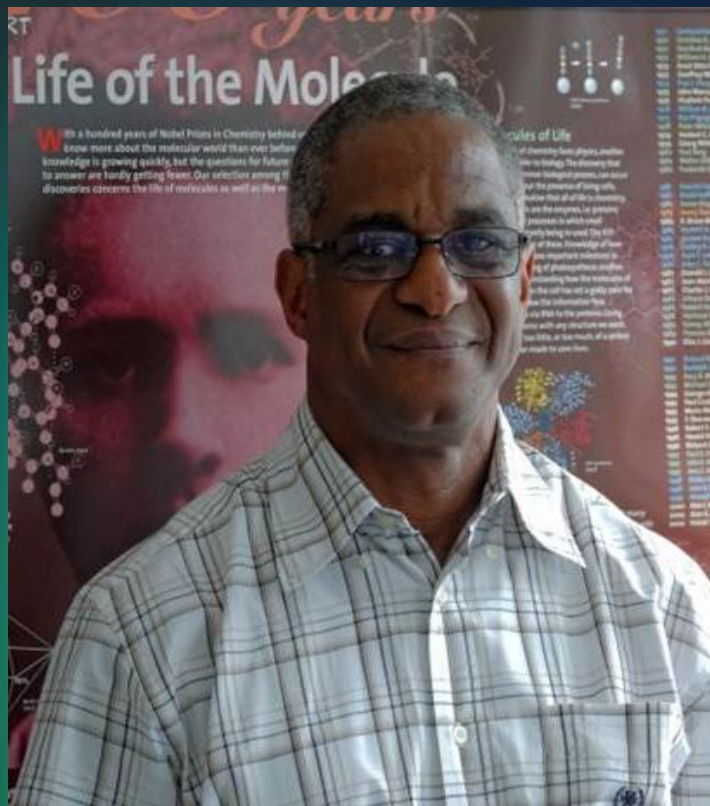
- Support basic research in atmosphere, earth, and ocean sciences
- Support research facilities and infrastructure (NCAR, research vessels, OOI, Antarctic base)
- Develop community-driven cyber-infrastructure
- Promote education and diversity in the geosciences
- Initiatives in hazards and resilience (PREevents, INFEWS)



The NSF Directorates and Offices



Mathematical & Physical Sciences (MPS)



David Rockcliffe

Division of Chemistry

drockclif@nsf.gov

- **Lead Program Director for the Chemistry of Life Processes Program**
- **Six years in the Division of Molecular and Cellular Biosciences before joining the Division of Chemistry**
- **Previously managed the Structural Biochemistry and Mechanistic Biochemistry programs**

Mathematical & Physical Sciences (MPS)

F. Fleming Crim, Assistant Director
Celeste Rohlfig, Deputy Assistant Director

Office of
Multidisciplinary
Activities (OMA)

Clark Cooper

Division of Astronomical Sciences (AST)

Jim Ulvestad, Division Director
Pat Knezek, Deputy Division Director

Division of Materials Research (DMR)

Mary Galvin, Division Director
Linda Sapochak, Deputy Division Director

Division of Physics (PHY)

Denise Caldwell, Division Director
Brad Keister, Deputy Division Director

Division of Chemistry (CHE)

David Berkowitz, Division Director
Carol Bessel, Acting Deputy Division
Director

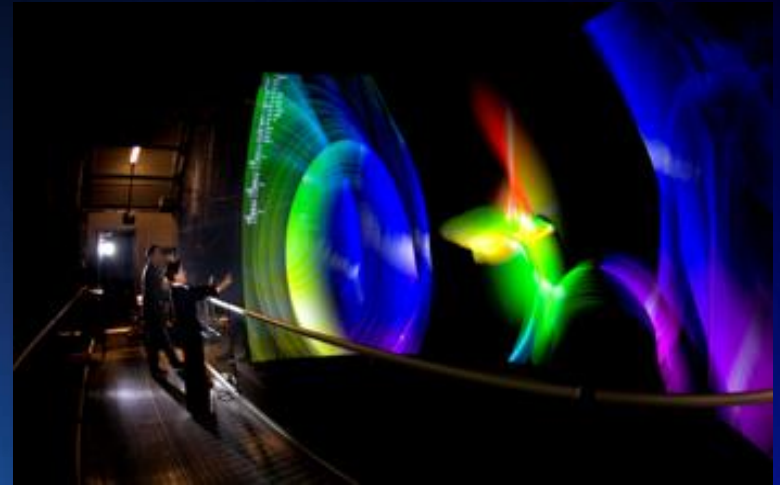
Division of Mathematical Sciences (DMS)

Michael Vogelius, Division Director
Herny Warchall, Deputy Division Director

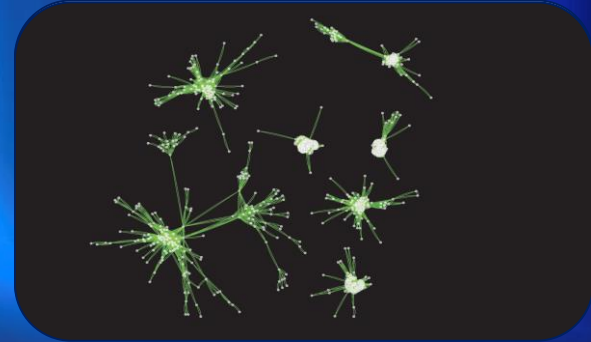
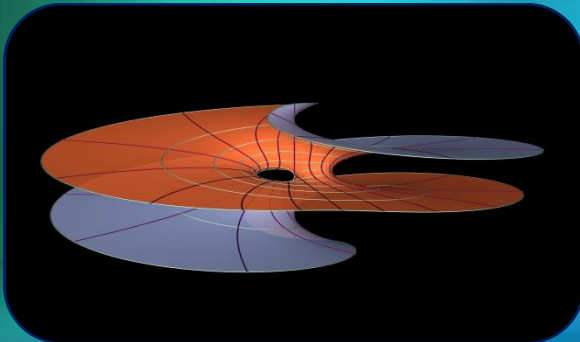
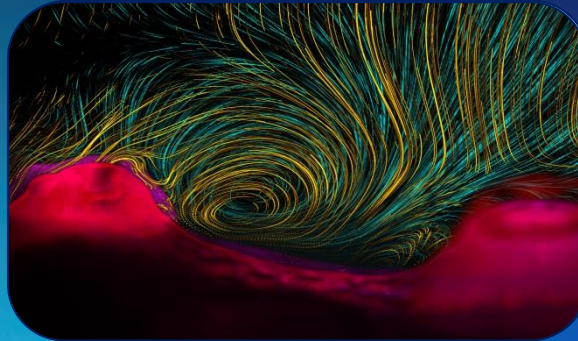
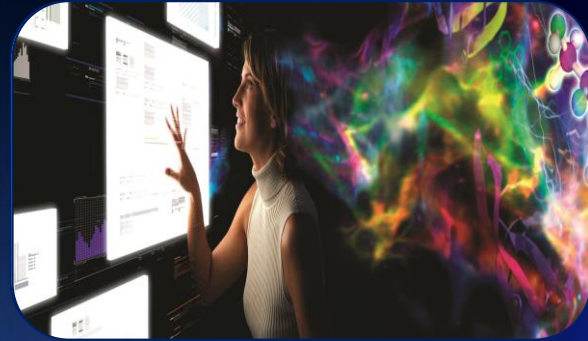
Mathematical & Physical Sciences (MPS)

Emphasis Areas

- Physical sciences at the nanoscale
- Advances in optics and photonics
- Materials by design
- Physics of the universe
- Quantum information science
- Complex systems (multi-scale, emergent phenomena)
- Innovations at the Nexus of Food, Energy and Water Systems (INFEWS)
- Sustainability (energy, environment, climate)
- Interface between the mathematical physical and life sciences
- Computational and data-enabled science and engineering (CDS&E)



The NSF Directorates and Offices



Social, Behavioral, & Economic Sciences (SBE)

Robert O'Connor

Risk and Management Sciences Program
boconnor@nsf.gov

Management team member for inter-
directorate competitions

Critical Resilient Infrastructure
Systems and Processes
Hazards

NSF's Representative to the National
Climate Assessment Committee

Professor Emeritus of Political Science,
Pennsylvania State University



Social, Behavioral & Economic Sciences

Fay Lomax Cook, Assistant Director
Clifford Gabriel, Acting Deputy
Assistant Director

SBE Office of
Multidisciplinary
Activities (SMA)

Behavioral and Cognitive Sciences (BCS)

Amber Story, Acting Division Director
TBD, Deputy Division Director

Social and Economic Sciences (SES)

Jeryl Mumpower, Division Director
Alan Tomkins, Deputy Division Director

National Center for Science and Engineering Statistics (NCSES)

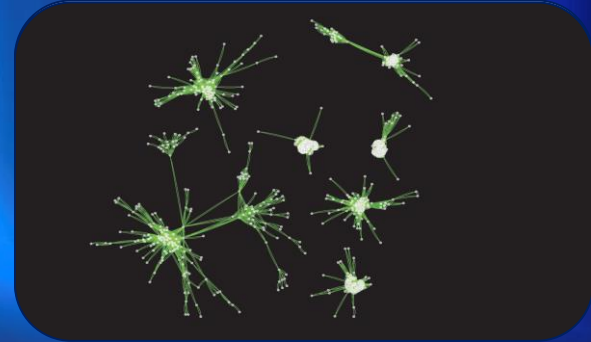
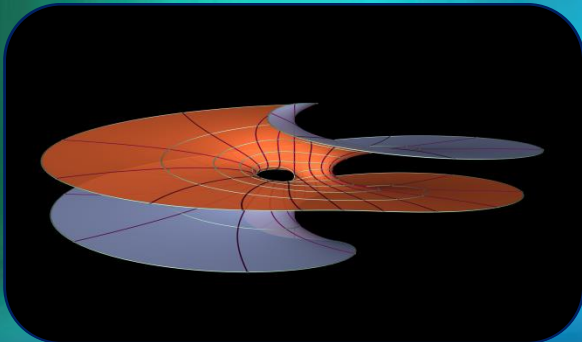
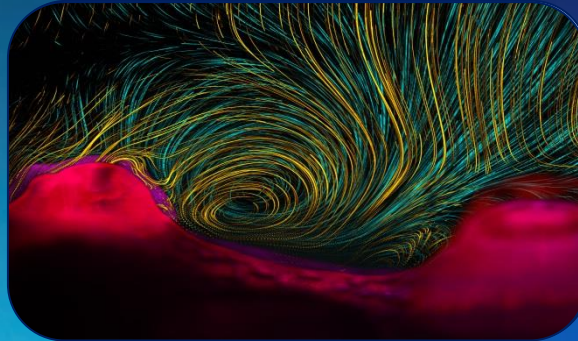
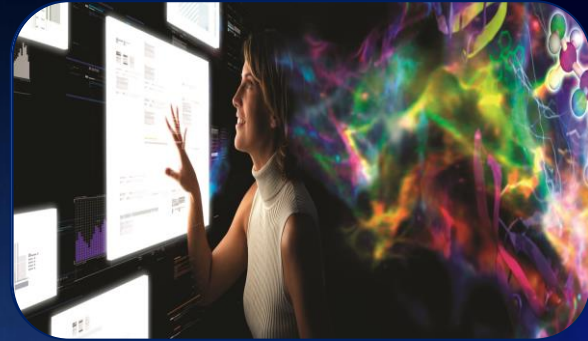
John Gawalt, Division Director
Jeri Mulrow, Deputy Division Director



SBE STANDING PROGRAMS

Methodology, Measurement & Statistics
Decision, Risk, & Management Sciences
Developmental & Learning Sciences
Science, Technology and Society
Archaeology and Archaeometry
Perception, Action, & Cognition
Geography & Regional Science
Science of Organizations
Biological Anthropology
Cognitive Neuroscience
Law and Social Science
Cultural Anthropology
Economics (Big Dog)
Social Psychology
Political Science
Linguistics
Sociology

The NSF Directorates and Offices



Office of International and Integrative Activities (OD/OIIA)

Randy L. Phelps

Integrative Activities

rphelps@nsf.gov



- Co-coordinates two NSF-wide programs: MRI and STC.
- Recent co-chair and still active member, INSPIRE Working Group
- Former program director in NSF's Astronomy Division
- Former full professor in the Department of Astronomy and Physics at California State University, Sacramento.

Office of International and Integrative Activities (OD/OIIA)

Wanda E. Ward, Office Head

```
graph TD; A["Wanda E. Ward, Office Head"] --> B["Integrative Activities (IA)  
Wanda E. Ward, Section Head"]; A --> C["Experimental Program to Stimulate Competitive Research (EPSCoR)  
Denise Barnes, Section Head"]; A --> D["International Science and Engineering (ISE)  
Kelsey Cook, Section Head (Acting)  
Rebecca Spyke Keiser (April 6)"];
```

Integrative Activities (IA)

Wanda E. Ward, Section Head

Experimental Program to Stimulate Competitive Research (EPSCoR)

Denise Barnes, Section Head

International Science and Engineering (ISE)

Kelsey Cook, Section Head (Acting)
Rebecca Spyke Keiser (April 6)

Integrative Activities (IA) and EPSCoR

Priorities

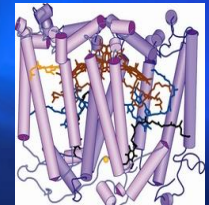
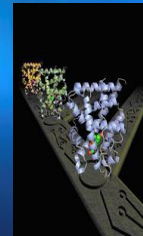
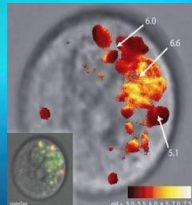
- IA: Leads and coordinates strategic programs and opportunities across disciplinary and geographic boundaries
 - Science and Technology Centers (STC)
 - Major Research Instrumentation (MRI)
 - Integrated NSF Support Promoting Inter-disciplinary Research and Education (INSPIRE)
- EPSCoR: Strengthens and Avoids Undue Concentration of STEM R&D throughout the U.S. Infrastructure Improvement (RII):
 - RII Track-1: Statewide projects to build research competitiveness
 - RII Track-2 Focused EPSCoR Collaborations: inter-state collaborations on topics of regional and national importance
 - RII Track-3 Building Diverse Communities: pilot to develop effective approaches to broadening participation in STEM.



International Science and Engineering (ISE)

Priorities

- Advance the FRONTIERS of S&E via international collaboration
- Prepare a GLOBALLY-ENGAGED U.S. S&E workforce
- Develop GLOBAL KNOWLEDGE NETWORKS that link U.S. faculty and students to the world
- Leverage RESOURCES, EXPERTISE, FACILITIES around the globe
Partnership for International Research and Education (PIRE)



Budget, Finance & Award Management (BFA)



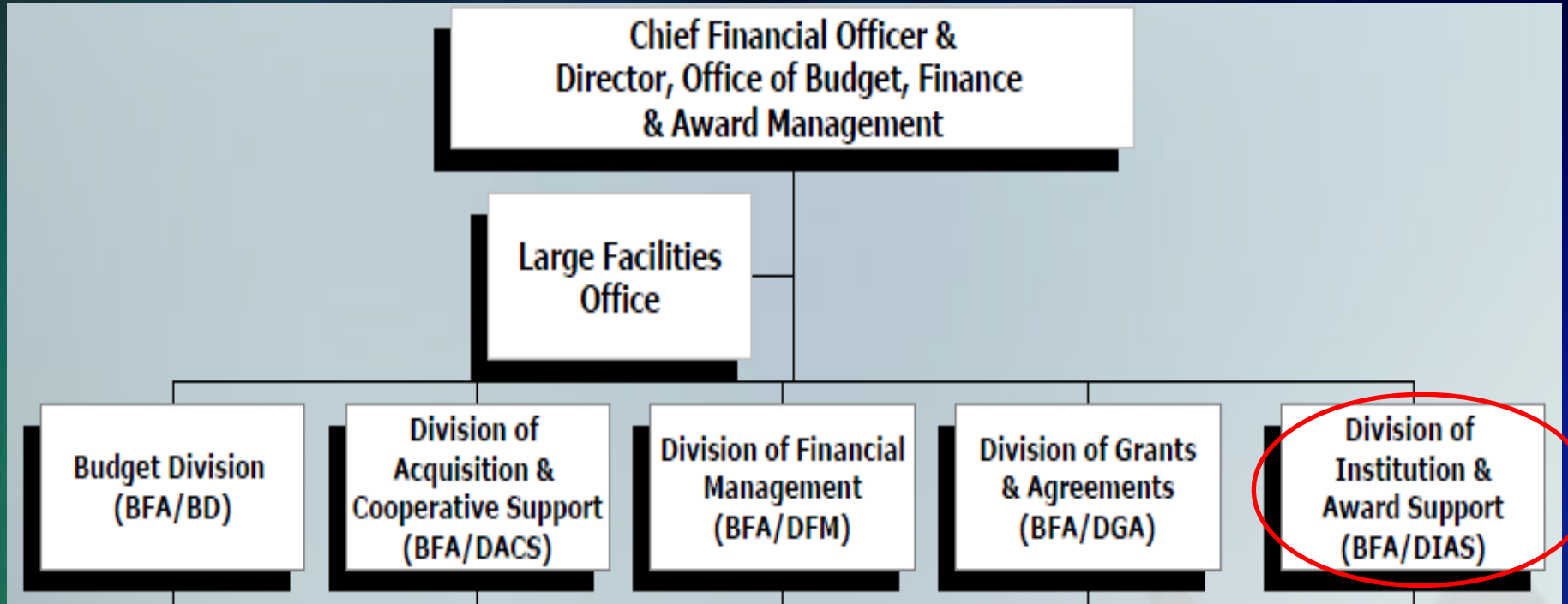
Jeremy Leffler

Policy Office, Division of Institution & Award
Support

jleffler@nsf.gov

- **Serves as outreach specialist for proposal & award policy**
- **Communicates policies and procedures to the research community and NSF staff**
- **Organizes bi-annual NSF Grants Conference**
- **Plans S & E research and education programs for institutions that are historically underserved in the federal arena.**

Budget, Finance & Award Management (BFA)



Recruiting Rotators

Nancy Roddy

Division of Human Resource Management

nroddy@nsf.gov



- **Advisor for special programs in a variety of business operations and human resources areas**
- **Focus on recruitment and outreach including social media**
- **See me to learn more about working at NSF!**

Recruiting Objectives for NSF



- **Build an increasingly diverse, engaged and high-performing workforce**
- **Effectively manage human capital**
- **Recruit rotators - come to my breakout session!**

Questions?

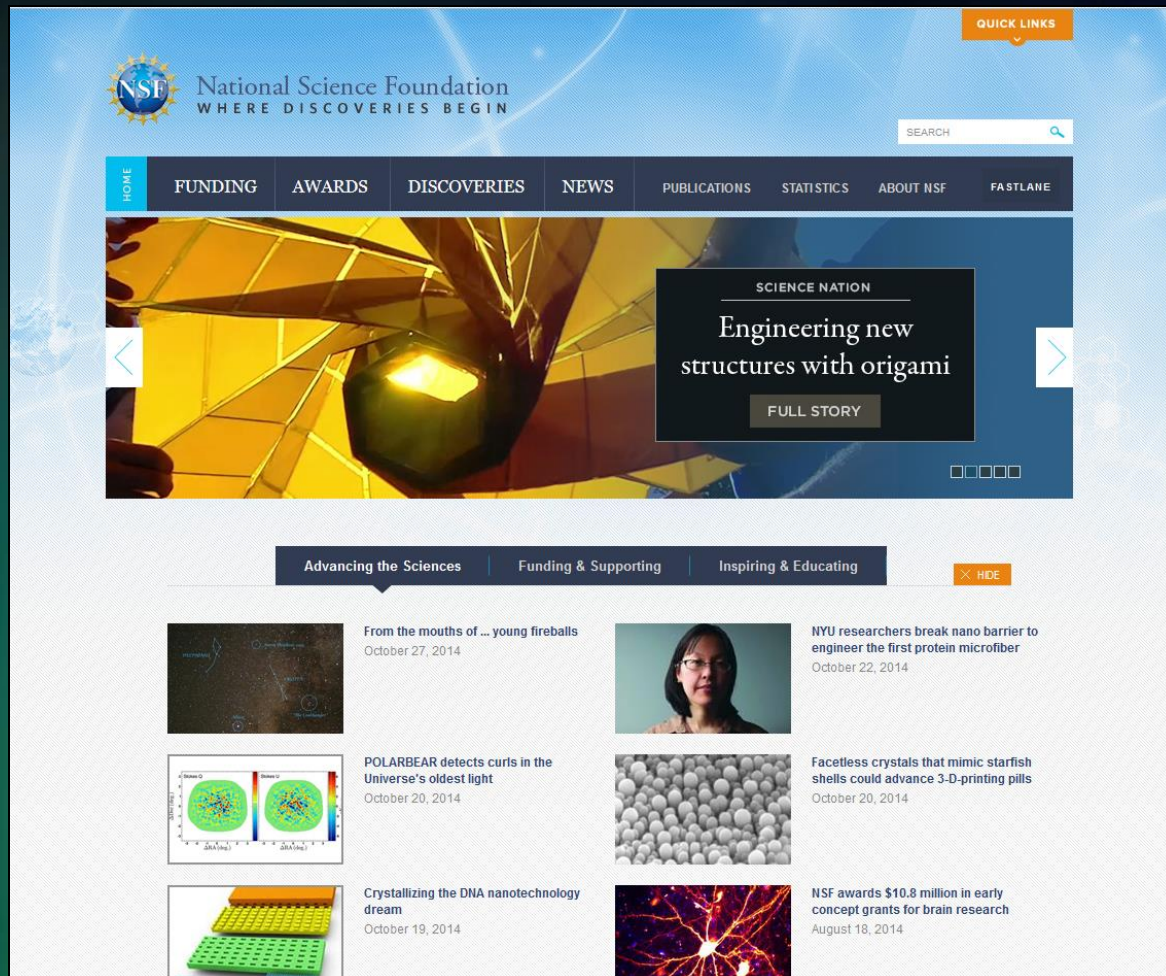


Break



Getting Started: The Essentials





The screenshot shows the NSF.gov homepage with a blue header featuring the NSF logo and the tagline "WHERE DISCOVERIES BEGIN". A navigation bar includes links for HOME, FUNDING, AWARDS, DISCOVERIES, NEWS, PUBLICATIONS, STATISTICS, ABOUT NSF, and FASTLANE. A search bar is located in the top right. The main banner features a large image of a hand holding a glowing origami structure, with the text "SCIENCE NATION Engineering new structures with origami" and a "FULL STORY" button. Below the banner, three tabs are visible: "Advancing the Sciences", "Funding & Supporting", and "Inspiring & Educating". The "Advancing the Sciences" tab is active, displaying a grid of six news items, each with a thumbnail image, a title, and a date. The items are: "From the mouths of ... young fireballs" (October 27, 2014), "POLARBEAR detects curls in the Universe's oldest light" (October 20, 2014), "Crystallizing the DNA nanotechnology dream" (October 19, 2014), "NYU researchers break nano barrier to engineer the first protein microfiber" (October 22, 2014), "Facetless crystals that mimic starfish shells could advance 3-D-printing pills" (October 20, 2014), and "NSF awards \$10.8 million in early concept grants for brain research" (August 18, 2014).

NSF National Science Foundation
WHERE DISCOVERIES BEGIN

QUICK LINKS

SEARCH

HOME FUNDING AWARDS DISCOVERIES NEWS PUBLICATIONS STATISTICS ABOUT NSF FASTLANE

SCIENCE NATION
Engineering new structures with origami
FULL STORY

Advancing the Sciences Funding & Supporting Inspiring & Educating

From the mouths of ... young fireballs
October 27, 2014

POLARBEAR detects curls in the Universe's oldest light
October 20, 2014

Crystallizing the DNA nanotechnology dream
October 19, 2014

NYU researchers break nano barrier to engineer the first protein microfiber
October 22, 2014

Facetless crystals that mimic starfish shells could advance 3-D-printing pills
October 20, 2014

NSF awards \$10.8 million in early concept grants for brain research
August 18, 2014



The screenshot shows the NSF.gov social media section. It features a "FOLLOW" button and a "FOLLOW US" section with icons for email, Facebook, Twitter, LinkedIn, YouTube, RSS, and Tumblr. A red circle highlights the social media icons. Below the icons is a link to "See all NSF social media". The section also includes a list of recent tweets, with one tweet visible: "UW study on radio: 1.usa.gov/1IH6LCp".

ever still

NSF awards \$10.8 million in early concept grants for brain research
August 18, 2014

FOLLOW

FOLLOW US

See all NSF social media

UW study on radio: 1.usa.gov/1IH6LCp

NSF Funding & Research Community

SPECIAL NOTICES

FUNDING
OPPORTUNITIES

Navigating www.NSF.gov

The screenshot shows the NSF.gov homepage. A red circle highlights the 'FUNDING' menu on the left. The menu options are:

- Search Funding Opportunities
- Browse Opportunities A-Z
- Recent Opportunities
- Due Dates
- Preparing Proposals
- Policies & Procedures
- Merit Review
- Interdisciplinary Research
- Transformative Research
- About Funding


The main navigation bar includes: HOME, FUNDING, AWARDS, DISCOVERIES, NEWS, PUBLICATIONS, STATISTICS, ABOUT NSF, and FASTLANE. A search bar is located in the top right corner.

The main banner features the text 'Understanding Bacterial Crowdsourcing' with a 'FULL STORY' button. Below the banner is a navigation bar with 'Advancing the Sciences', 'Funding & Supporting', and 'Inspiring & Educating', followed by a 'HIDE' button.

The content area displays several research highlights:

- VIMS Researchers Unravel Life Cycle of Blue-crab Parasite** (October 4, 2012)
- Home-based Assessment Tool for Dementia Screening** (October 2, 2012)
- A Mammal Lung, In 3-D** (October 2, 2012)
- URI Scientists: Marine Plants Can Flee to Avoid Predators** (October 1, 2012)
- White Shark Diets Vary With Age and**
- Disappearing Act**

Navigating www.NSF.gov



Are squiggly lines the future of password security?
June 2, 2014



New Understanding the Brain Website features funding opportunities, research areas
April 2, 2014

NSF Funding & Research Community

SPECIAL NOTICES

NSF Strategic Plan for FY 2014-2018

New NSF Proposal & Award Policies and Procedures Guide Issued, Effective for Proposals Submitted or Due On or After February 24, 2014

NSF Information Related to the American Recovery and Reinvestment Act of 2009

EVENT CALENDAR

17
JUN

NSF ADVANCE Program New Solicitation Webinars
WEBCAST

19
JUN

CDL - The Future of Computing - Mediated Research and Innovation
WEBCAST

19

The Future of Computing - Mediated Research and Innovation



FUNDING OPPORTUNITIES

Search Funding Opportunities

Search by Program Area

[VIEW ALL FUNDING OPPORTUNITIES](#) 

[Proposal and Award Policies and Procedures Guide](#)

[Prepare a Proposal](#)

[Upcoming Due Dates](#)


[Submit Proposal to FastLane](#)

Navigating www.NSF.gov



National Science Foundation

QUICK LINKS



Research Areas

- › Biological Sciences
- › Computer & Information Science & Engineering
- › Cyberinfrastructure
- › Education and Human Resources
- › Engineering
- › Environmental Research & Education
- › Geosciences
- › Integrative Activities
- › International Science & Engineering
- › Mathematical & Physical Sciences
- › Polar Programs
- › Social, Behavioral & Economic Sciences



Funding & Awards

FUNDING INFO

- › Search Funding Opportunities
- › Browse Funding Opportunities A-Z
- › Recent Funding Opportunities
- › How to Prepare a Funding Proposal
- › Grant Proposal Guide
- › Submit a Proposal to FastLane

AWARD INFO

- › Managing Awards
- › Award & Administration Guide
- › Search Awards
- › Award Statistics (Budget Internet Info System)



Contact Us

- › Staff Directory
- › Organization List
- › Visit NSF
- › Work at NSF
- › Do Business with NSF
- › Press
- › Inspector General Hotline
- › How Do I ...?

The National Science Foundation
4201 Wilson Boulevard, Arlington,
Virginia 22230, USA

Tel: (703) 292-5111
FIRS: (800) 877-8339
TDD: (800) 281-8749



Learning Resources

- › Film, TV, Exhibits & More!
- › Slideshows & Photo Galleries
- › Classroom Resources
- › Funding for Research on Learning in Formal & Informal Settings



News & Discoveries

- › [Recent News](#)
- › Recent Discoveries
- › Multimedia Gallery
- › Special Reports



Navigating www.NSF.gov

The screenshot displays the NSF.gov website. At the top left is the NSF logo with the text "National Science Foundation WHERE DISCOVERIES BEGIN". To the right is a "QUICK LINKS" button. Below this is a search bar with the text "SEARCH" and a magnifying glass icon. A red circle highlights this search bar, with a red arrow pointing to it from the right. Below the search bar is a navigation bar with links: HOME, FUNDING, AWARDS, DISCOVERIES, NEWS, PUBLICATIONS, STATISTICS, ABOUT NSF, and FASTLANE. Below the navigation bar is a sub-navigation bar with links: Simple Search, Advanced Search, Popular Searches, Download Awards, Send Comments, and Award Search Help. The main content area is titled "Awards Simple Search". Below this title is a "NEW" badge and a link "See What's New in the New Award Search". Below this is a search bar with the text "Search award for:" and a "Search" button with a green arrow. A red circle highlights this search bar, with a red arrow pointing to it from the left. Below the search bar is a note: "Use double quotes for exact search. For example 'water vapor'." Below this note are two checkboxes: "Active Awards" (checked) and "Expired Awards" (unchecked). At the bottom of the page is a footer with links: Research.gov, USA.gov, National Science Board, Recovery Act, Budget and Performance, A Web Policies and Important Links, Privacy, FOIA, NO FEAR Act, Inspector General, and Webmas. The NSF logo is also present in the footer.

NSF National Science Foundation
WHERE DISCOVERIES BEGIN

QUICK LINKS

SEARCH

HOME FUNDING AWARDS DISCOVERIES NEWS PUBLICATIONS STATISTICS ABOUT NSF FASTLANE

Simple Search Advanced Search Popular Searches Download Awards Send Comments Award Search Help

Awards Simple Search

NEW See What's New in the New Award Search

Search award for: Search

Use double quotes for exact search. For example "water vapor".

☒ Active Awards ☐ Expired Awards

FUNDING AWARDS DISCOVERIES NEWS PUBLICATIONS STATISTICS ABOUT NSF FASTLANE

Research.gov | USA.gov | National Science Board | Recovery Act | Budget and Performance | A
Web Policies and Important Links | Privacy | FOIA | NO FEAR Act | Inspector General | Webmas

NSF

Navigating www.NSF.gov

HOME FUNDING AWARDS DISCOVERIES NEWS PUBLICATIONS STATISTICS ABOUT NSF FASTLANE

Simple Search | Advanced Search | Popular Searches | Download Awards | Send Comments | Award Search Help

Awards Advanced Search

NEW [See What's New in the New Award Search](#)

Awardee Information

Principal Investigator First Name

Principal Investigator Last Name

☐ Include Co-Principal Investigator in name search

Organization

State

Zip Code

Country

Program Information

NSF Organization

Element Code

☐ Any ☒ All

Reference Code

☐ Any ☒ All

HINT: The "Program" box searches both program element and program reference names and codes.

Program

Program Officer

Additional Information

Keyword

HINT: The Keyword field searches on the title and abstract only.

☐ Search Award Title Only

Award Number

From **To**

Award Amount

Award Instrument

HINT: Data prior to 1976 may be less complete.

☒ Active Awards ☐ Expired Awards

Original Award Date **From** **To**

Start Date **From** **To**

Expiration Date **From** **To**

Drilling Down

Directorate for Computer & Information Science & Engineering

Secure and Trustworthy Cyberspace (SaTC)

CONTACTS

| Name | Email | Phone | Room |
|--------------------------------------|--|----------------|-------|
| Jeremy Epstein | jepstein@nsf.gov | (703) 292-8338 | 1175 |
| Nina Amla | namla@nsf.gov | (703) 292-8910 | 1115 |
| Christopher Clifton | cclifton@nsf.gov | (703) 292-8930 | |
| Sol Greenspan | sgreensp@nsf.gov | (703) 292-8910 | 1115 |
| Wenjing Lou | wlou@nsf.gov | (703) 292-8950 | 1175 |
| Anita Nikolic | anikolic@nsf.gov | (703) 292-8970 | |
| Deborah Shands | dshands@nsf.gov | (703) 292-4505 | 1175 |
| Ralph Wachter | rwachter@nsf.gov | (703) 292-8950 | 1175 |
| Victor P. Piotrowski | vpiotrow@nsf.gov | (703) 292-5141 | 865 |
| Andrew D. Pollington | adpollin@nsf.gov | (703) 292-4878 | 1025 |
| Zhi (Gerry) Tian | ztian@nsf.gov | (703) 292-2210 | 525 |
| Heng Xu | hxu@nsf.gov | (703) 292-8643 | 995 N |

SaTC Questions: satc@nsf.gov

PROGRAM GUIDELINES

Solicitation [14-599](#)

List of program officers and contact info (ask if email or phone is better)

Do NOT send to each person!

Generic address

Link to current solicitation(s)

Drilling Down

Important Information for Proposers

A revised version of the *NSF Proposal & Award Policies & Procedures Guide (PAPPG)* (NSF 15-1), is effective for proposals submitted, or due, on or after December 26, 2014. The PAPPG is consistent with, and, implements the new Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards (Uniform Guidance) (2 CFR § 200). NSF anticipates release of the PAPPG in the Fall of 2014. Please be advised that, depending on the specified due date, the guidelines contained in NSF 15-1 may apply to proposals submitted in response to this funding opportunity.

DUE DATES

Full Proposal Window: December 4, 2014 - December 19, 2014
CYBERSECURITY EDUCATION Projects
December 4 - December 19, Annually Thereafter


Full Proposal Window: January 2, 2015 - January 14, 2015
SMALL Projects
January 2 - January 14, Annually Thereafter

Full Proposal Window: September 2, 2015 - September 21, 2015
MEDIUM Projects
September 2 - September 19, Annually Thereafter


Full Proposal Window: November 4, 2015 - November 19, 2015
LARGE Projects
November 4 - November 19, Annually Thereafter

SYNOPSIS


Cyberspace has transformed the daily lives of people for the better. The rush to adopt cyberspace, however, has exposed its fragility and vulnerabilities: corporations, agencies, national infrastructure and individuals have been victims of cyber-attacks. In December 2011, the National Science and Technology Council (NSTC) with the cooperation of NSF issued [a broad, coordinated Federal strategic plan](#) for cybersecurity research and development to "change the game," minimize the misuses of cyber technology, bolster education and training in cybersecurity, establish a science of cybersecurity, and transition promising cybersecurity research into practice. This challenge requires a dedicated approach to research, development, and education that leverages the disciplines of mathematics and statistics, the social sciences, and engineering together with the computing, communications and information sciences.



Important
announcements



Submission windows,
target dates and/or
deadlines



Program Synopsis

Drilling Down

RELATED URLS

[Frequently Asked Questions \(FAQs\) for SaTC \(NSF 14-599\)](#)

[Frequently Asked Questions \(FAQs\) for SaTC \(NSF 13-578\) - archived](#)

[Frequently Asked Questions \(FAQs\) for SaTC \(NSF 12-503\) - archived](#)

[SaTC Webinar \(December 2, 2011\)](#)

REVISIONS AND UPDATES

THIS PROGRAM IS PART OF

[Additional Funding Opportunities for the CCF Community](#)

[Additional Funding Opportunities for the CNS Community](#)

[Additional Funding Opportunities for the IIS Community](#)

[Additional Opportunities](#)


[Other Special Research Programs Available to DMS Communities](#)

[What Has Been Funded \(Recent Awards Made Through This Program, with Abstracts\)](#)


[Map of Recent Awards Made Through This Program](#)

[News](#)

[Discoveries](#)



Related URLs (FAQs, webinars, etc)



Other related organizations



Past funding by the program

Additional Information on Resources

Join Directorate
Specific Listserves!

Use Grants.gov's
search feature

The screenshot shows the Grants.gov homepage. At the top, there's a navigation bar with links: CONTACT US, MANAGE SUBSCRIPTIONS, REGISTER, LOGIN. A search bar is present with a dropdown menu set to 'Grant Opportunities' and a 'GO' button. Below the navigation bar, there's a main menu with links: HOME, ABOUT, SEARCH GRANTS, APPLICANTS, GRANTORS, SYSTEM-TO-SYSTEM, FORMS, OUTREACH, SUPPORT. The main content area is divided into three sections. The left section, titled 'Find Grants', contains text about searching for federal grants and a red button labeled 'Search Grant Opportunities'. The middle section, titled 'Find Open Grant Opportunities', features a table of grant listings with columns for Funding Opportunity Number, Opportunity Title, and Agency. The right section, titled 'Grants.gov Updates', contains a yellow box about a scheduled maintenance outage and links to the Grants.gov Calendar and Blog. Below this is a 'Did You Know?' section with two light blue boxes containing tips and information about registration and AOR status.

Find Grants
SEARCH Grants.gov for your federal grants by keywords or more specific criteria. All discretionary grants offered by the 26 federal grant-making agencies can be found on Grants.gov. You do not have to register with Grants.gov to find grant opportunities.
[Search Grant Opportunities »](#)

Find Open Grant Opportunities

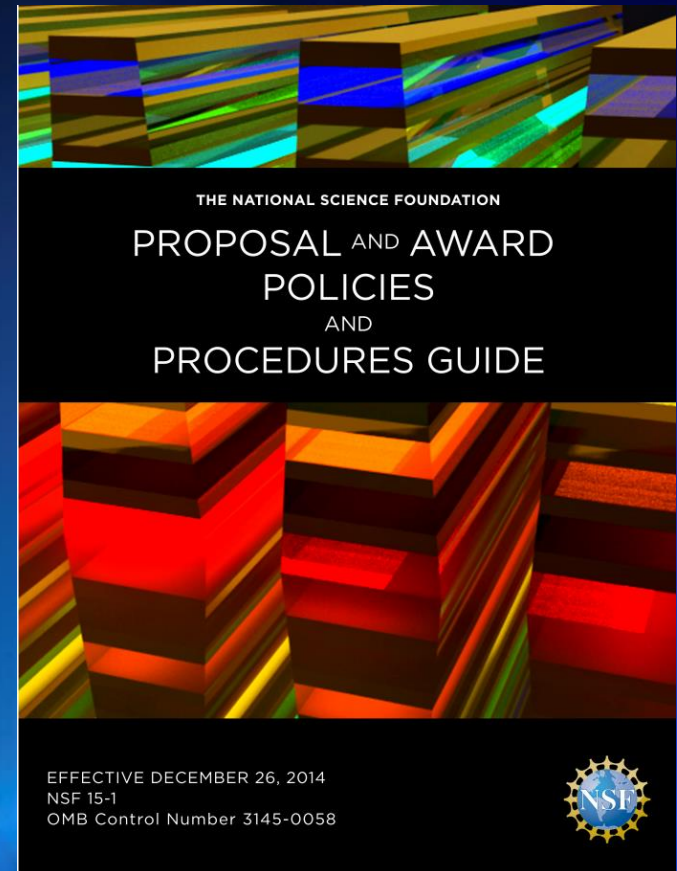
| Funding Opportunity Number | Opportunity Title | Agency |
|----------------------------|--|---|
| RFA-263-14-000001 | Local Scholarship Program | Egypt USAID-Cairo |
| NNH14ZDA001N-RST | ROSES 2014: Remote Sensing Theory for Earth Science | NASA Headquarters |
| CDC-RFA-DP14-1419PPHF14 | PPHF 2014: Racial and Ethnic Approaches to Community Health (REACH) - financed in part by Prevention and Public Health Funding | Chronic Disease Prevention and Health Promotion |
| HHS-2014-ACL-CDAP-SO-0089 | State Health Insurance Assistance Program Performance Improvement and Innovation Grant | Administration for Community Living |
| DARPA-BAA-14-46 | DSO Office-Wide | DARPA - Defense Sciences |

Grants.gov Updates:
 Grants.gov Scheduled Maintenance Outage: June 21-23, 2014.
For more information on scheduled maintenance outages and status updates, please visit the following:
[Grants.gov Calendar »](#)
[Grants.gov Blog »](#)

Did You Know?
 Did you know new features were recently added? For a full description of the new enhancements covered in the Applicant Release Notes, click [here »](#)
 Did you know that Grants.gov must receive verification of registration from SAM electronically before AORs can submit applications on Grants.gov? Please allow 24-48 hours from the date of the SAM email notification to complete the electronic process. To quickly and easily verify Grants.gov AOR status, click [here »](#)

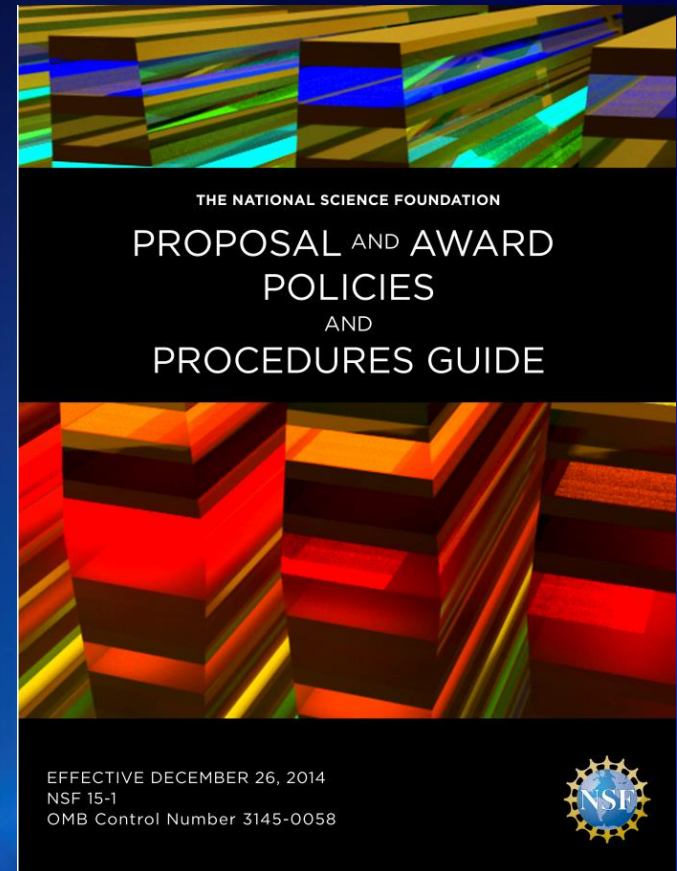
What is the Proposal & Award Policies & Procedures Guide?

The Proposal and Award Policies and Procedures Guide (PAPPG) contains documents relating to NSF's proposal and award process. It has been designed for use by both our customer community and NSF staff and consists of two parts:



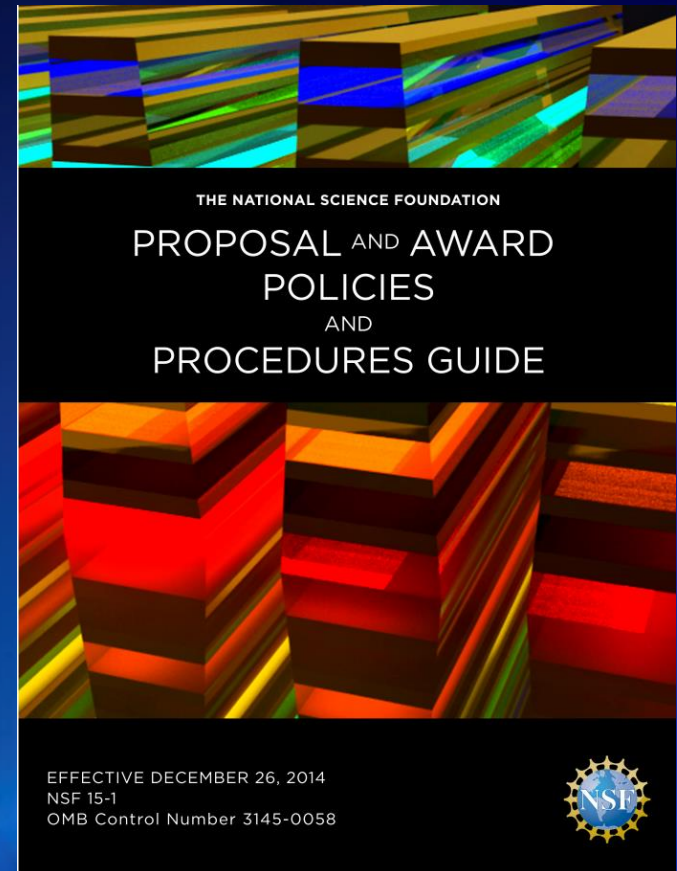
What is the Proposal & Award Policies & Procedures Guide?

Part I is NSF's proposal preparation and submission guidelines -- the NSF Grant Proposal Guide (GPG) and the NSF Grants.gov Application Guide.



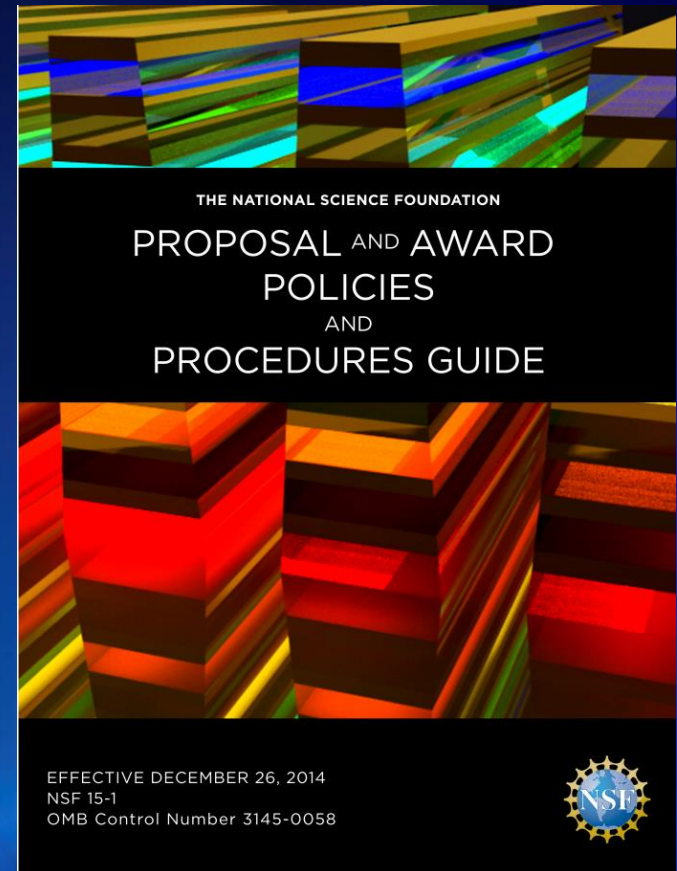
What is the Proposal & Award Policies & Procedures Guide?

Part II is NSF's award and administration guidelines -- the documents used to guide, manage, and monitor the award and administration of grants and cooperative agreements made by NSF.



Grant Proposal Guide

- Provides guidance for preparation and submission of proposals to NSF
- Describes process – and criteria – by which proposals will be reviewed
- Outlines reasons why a proposal may not be accepted or may be returned without review
- Describes process for withdrawals, returns, and declinations
- Describes the NSF Reconsideration Process



Types of Funding Opportunities

Program Descriptions

Proposals for a **Program Description** must follow the instructions in the GPG.

Program Announcements

Proposals for a **Program Announcement** must follow the instructions in the GPG.

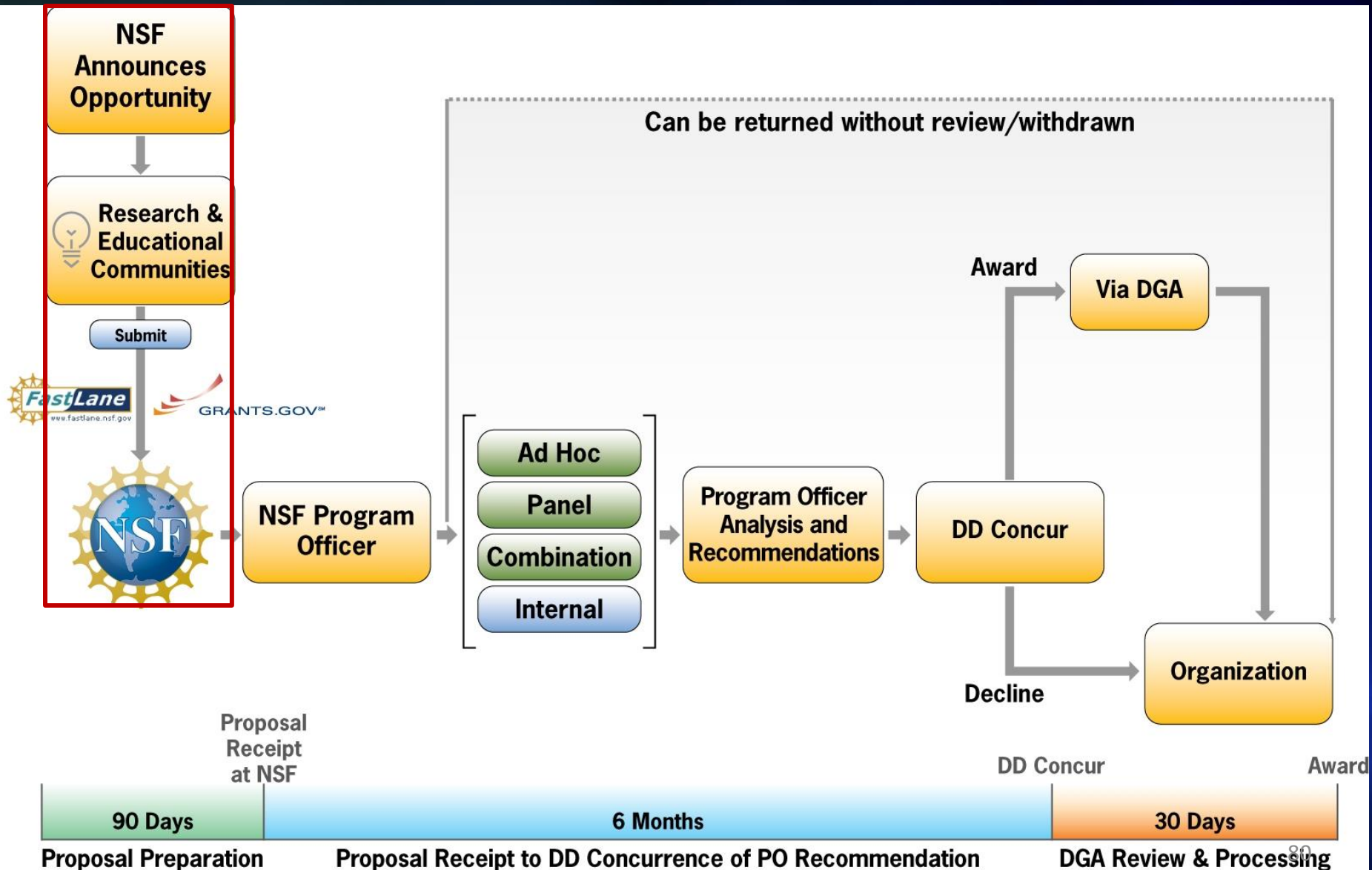
Program Solicitations

Proposals must follow the instructions in the **Program Solicitation**; the instructions in the GPG apply unless otherwise stated in the solicitation.

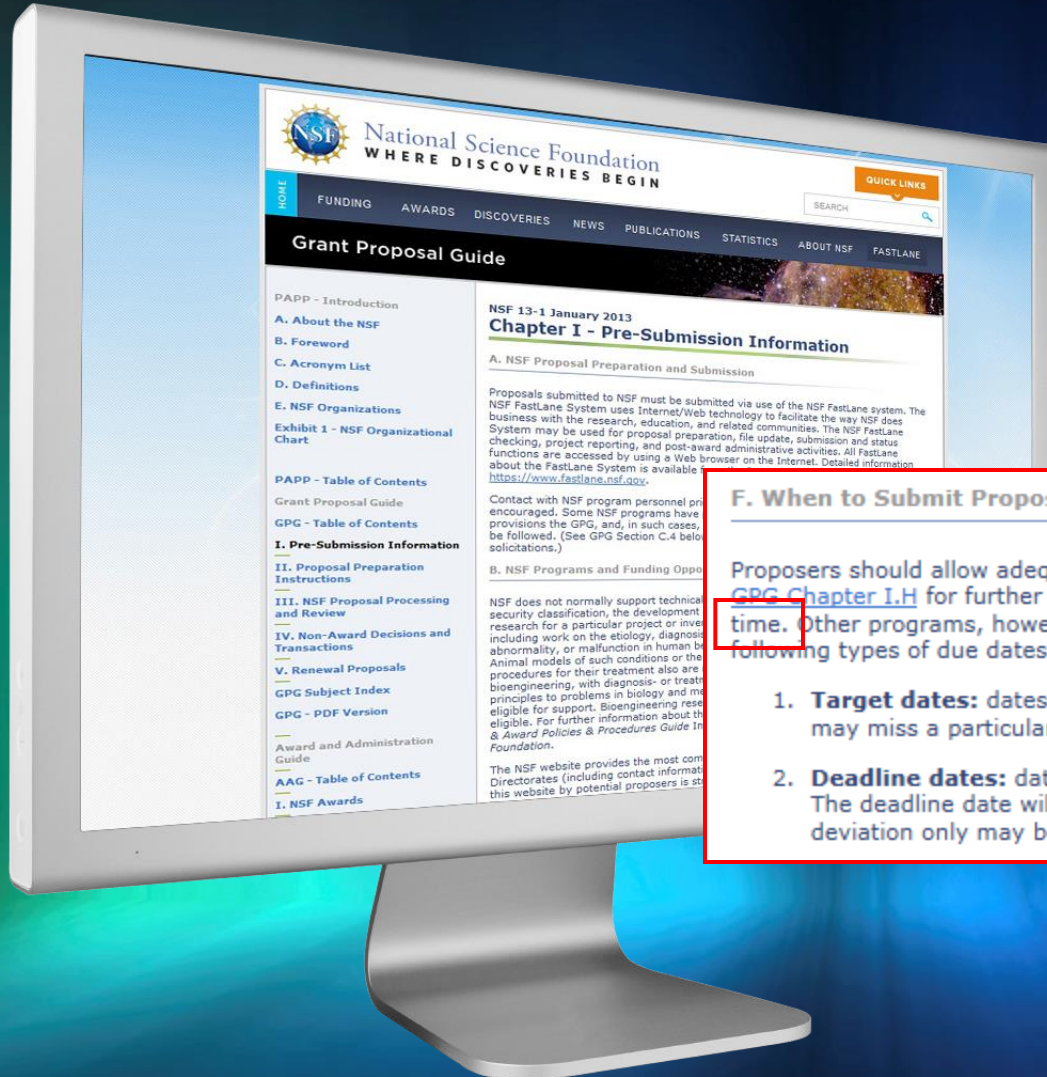
Dear Colleague Letters

Dear Colleague Letters are notifications of opportunities or special competitions for supplements to existing NSF awards.

NSF Proposal & Award Process Timeline



Types of Proposal Submissions



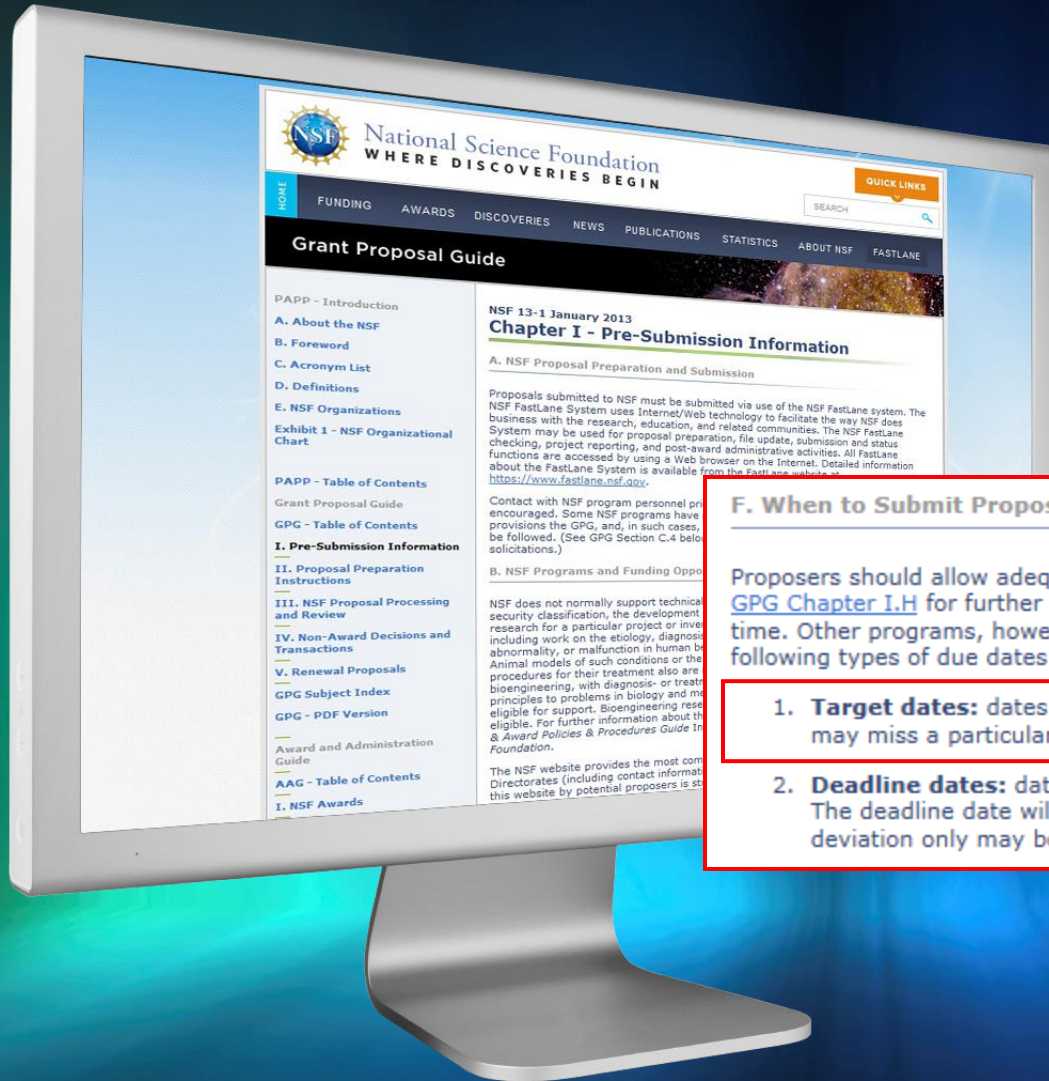
No Deadlines – Proposals may be submitted at any time

F. When to Submit Proposals

Proposers should allow adequate time for NSF review and processing of proposals (see [GPG Chapter I.H](#) for further information). Many NSF programs accept proposals at any time. Other programs, however, establish due dates for submission of proposals. The following types of due dates are utilized by NSF:

1. **Target dates:** dates after which proposals will still be accepted, although they may miss a particular panel or committee meeting.
2. **Deadline dates:** dates after which proposals be returned without review by NSF. The deadline date will be waived only in extenuating circumstances. Such a deviation only may be authorized in accordance with [GPG Chapter II.A](#).

Types of Proposal Submissions



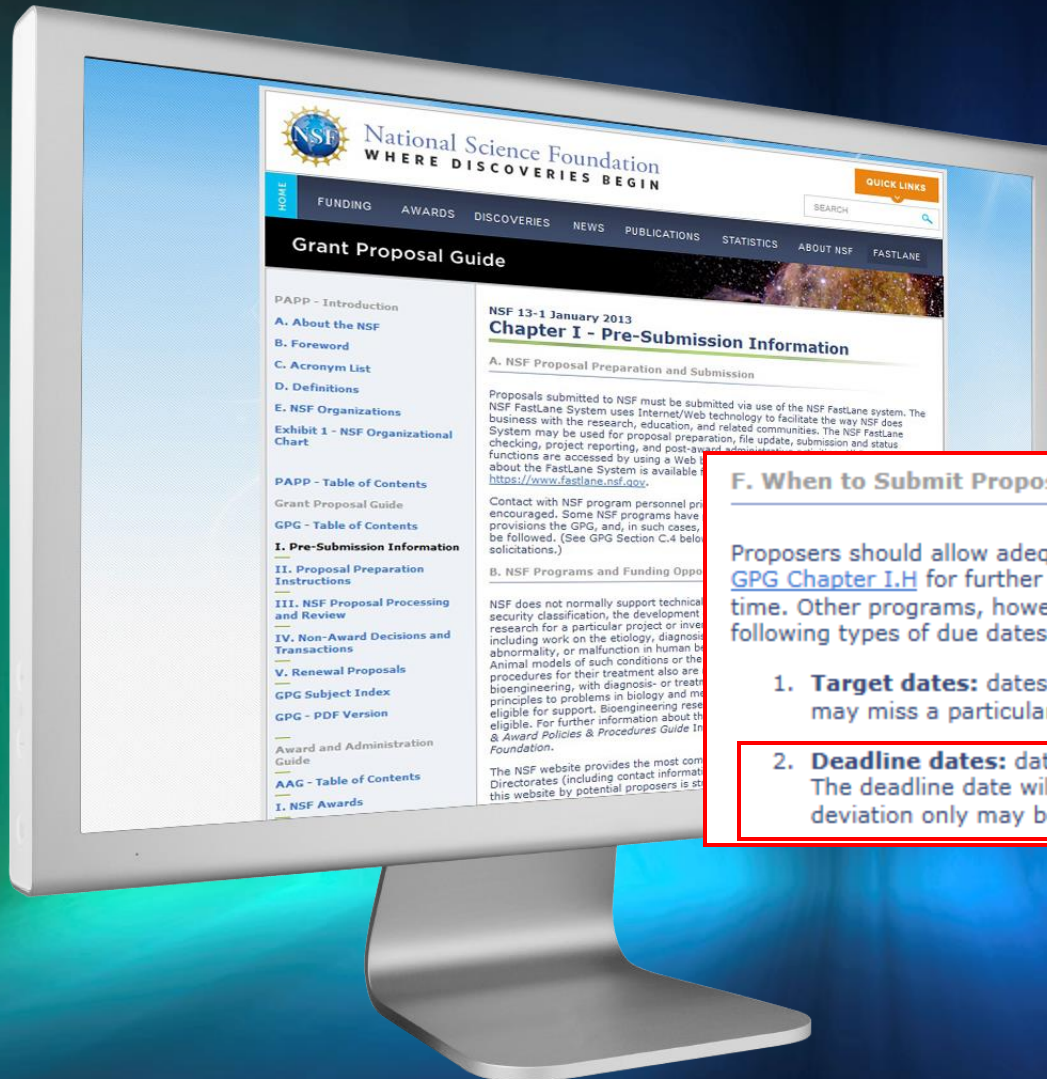
Target Dates –
Talk to the Program Office
if you think you might miss
the date

F. When to Submit Proposals

Proposers should allow adequate time for NSF review and processing of proposals (see [GPG Chapter I.H](#) for further information). Many NSF programs accept proposals at any time. Other programs, however, establish due dates for submission of proposals. The following types of due dates are utilized by NSF:

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2. **Deadline dates:** dates after which proposals be returned without review by NSF. The deadline date will be waived only in extenuating circumstances. Such a deviation only may be authorized in accordance with [GPG Chapter II.A](#).

Types of Proposal Submissions



Deadline Dates –
Proposals will not be accepted after this date and time (5 pm submitter's local time)

F. When to Submit Proposals

Proposers should allow adequate time for NSF review and processing of proposals (see [GPG Chapter I.H](#) for further information). Many NSF programs accept proposals at any time. Other programs, however, establish due dates for submission of proposals. The following types of due dates are utilized by NSF:

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2. **Deadline dates:** dates after which proposals be returned without review by NSF. The deadline date will be waived only in extenuating circumstances. Such a deviation only may be authorized in accordance with [GPG Chapter II.A](#).

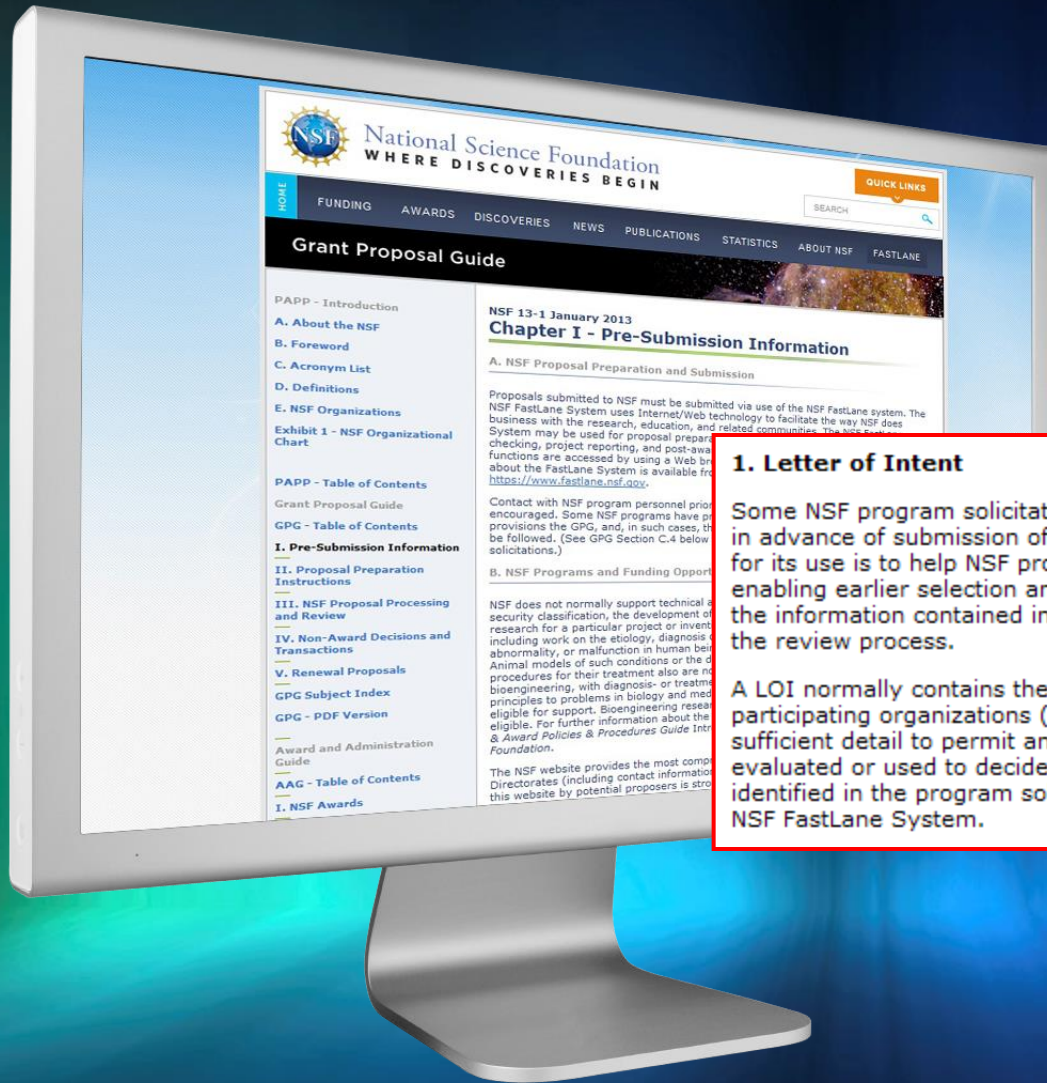
Types of Proposal Submissions



Submission Windows –
Closing date converts to a
deadline date

3. Submission windows: designated periods of time during which proposals will be accepted for review by NSF. It is NSF's policy that the end date of a submission window converts to, and is subject to, the same policies as a deadline date.

Types of Proposal Submissions



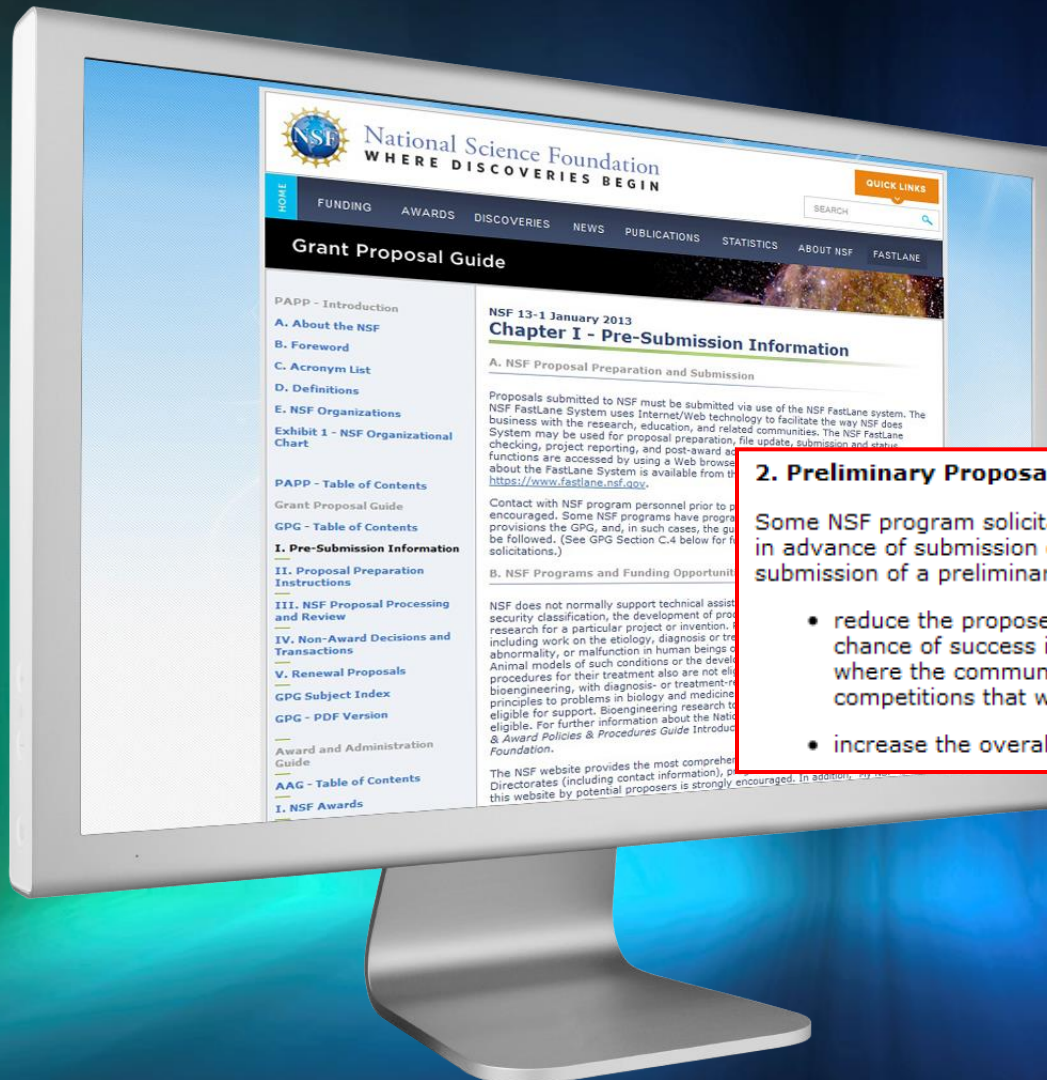
Letters of Intent –
Enables better management of reviewers and panelists

1. Letter of Intent

Some NSF program solicitations require or request submission of a letter of intent (LOI) in advance of submission of a full proposal. A LOI is not binding. The predominant reason for its use is to help NSF program staff to gauge the size and range of the competition, enabling earlier selection and better management of reviewers and panelists. In addition, the information contained in a LOI is used to help avoid potential conflicts of interest in the review process.

A LOI normally contains the PI's and co-PI's names, a proposed title, a list of possible participating organizations (if applicable), and a synopsis that describes the work in sufficient detail to permit an appropriate selection of reviewers. A LOI is not externally evaluated or used to decide on funding. The requirement to submit a LOI will be identified in the program solicitation, and such letters are submitted electronically via the NSF FastLane System.

Types of Proposal Submissions



Preliminary Proposals –
Sometimes required,
sometimes optional

2. Preliminary Proposal

Some NSF program solicitations require or request submission of a preliminary proposal in advance of submission of a full proposal. The two predominant reasons for requiring submission of a preliminary proposal are to:

- reduce the proposers' unnecessary effort in proposal preparation when the chance of success is very small. This is particularly true of exploratory initiatives where the community senses that a major new direction is being identified, or competitions that will result in a small number of actual awards; and
- increase the overall quality of the full submission.

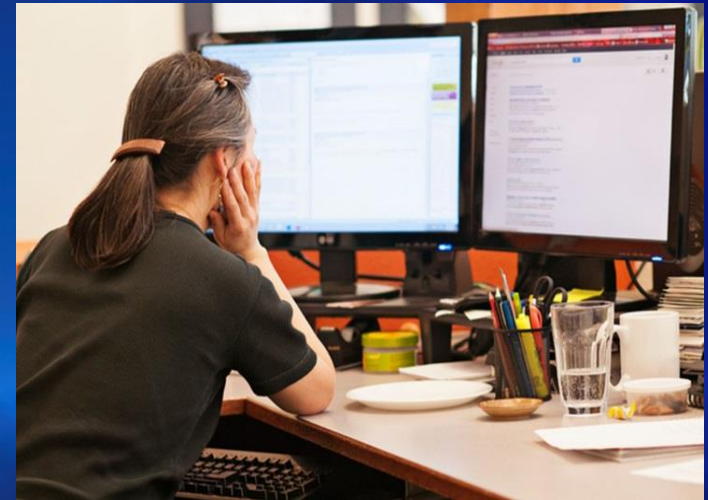
Questions on Funding Opportunities?



Contact your NSF Program Officer-
after checking the website
and solicitation 😊

Work with your organization's
sponsored projects office

Look for workshops on
federal research funding





Things to Consider Before Applying...

Five Key Elements

1. Great idea
2. Fit with current research expertise and career development plans
3. Ability to devise a strategy including benchmarks, timelines, and metrics
4. Adequate resources to accomplish your project
5. Assessment Plan



Developing your Proposal

Key Questions for Prospective Investigators

- What has already been done?
- What do you intend to do?
- Why is the work important?
- How is the work unique or cutting edge?
- How are you going to do the work?
- Do you have the right team?

Proposal Development Strategies:

What Do You Need Besides \$???

- Prepare to do the project
 - Realistically assess needs
 - Determine available resources
 - Develop preliminary data
 - Present to colleagues/mentors/students
- Determine possible funding sources
(NSF may not be the right or the only one)



Proposal Development Strategies:

What details should you glean from the solicitation?



- Overall scope and mission
- Instructions (deviations from the GPG)
- How your proposed project fits with the solicitation
- Review procedures and criteria
- Deadlines

Proposal Development Strategies:

Who Should You Talk To? How Should You Contact Them?

NSF Program Officer

- Your proposed project
- Clarifications on specific program requirements/limitations
- Current program patterns

Your organization's sponsored projects office

- University guidelines for applications
- Institutional Review Board “IRB” Approvals
(IACUC approvals, etc.)



So You Want to Write a Proposal...

What to Look for in a Program Announcement or Solicitation

- Goals
- Eligibility Requirements
- Special proposal preparation
and/or award requirements
- Review Criteria



Sample Cover Page of a Solicitation

Louis Stokes Alliances for Minority Participation (LSAMP)

PROGRAM SOLICITATION
NSF 12-564



REPLACES DOCUMENT(S):
NSF 11-543



National Science Foundation

Directorate for Education & Human Resources
Division of Human Resource Development



Full Proposal Deadline(s) (due by 5 p.m. proposer's local time):

August 28, 2012

Bridge to the Doctorate

October 05, 2012

First Friday in October, Annually Thereafter

Bridge to the Doctorate

**Program
Solicitation
Number**

**NSF Directorates
and Offices
providing funding
for this
opportunity**

Sample Cover Page of a Solicitation

Award Information

Anticipated Type of Award: Standard Grant or Continuing Grant or Cooperative Agreement

Estimated Number of Awards: 60



Up to 60 awards will be made across fiscal 2012 and 2013.

In FY 2012, up to 20 Bridge to the Doctorate (BD) grants will be made.

In FY2013, 20 Alliance grants (this includes 5 B2B), up to 15 Bridge to the Doctorate (BD) grants and up to 5 Broadening Participation Research (BPR) in STEM Education grants.

Anticipated Funding Amount: \$20,000,000



\$20,000,000 across fiscal years 2012 and 2013; Subject to the availability of funds.

**Expected number
of awards funded
by the program
per year**

**Expected funds
available to the
program per year**

Sample Cover Page of a Solicitation

Eligibility Information

Organization Limit:

Proposals may only be submitted by the following:

- Universities and Colleges - Universities and two- and four-year colleges (including community colleges) accredited in, and having a campus located in the US, acting on behalf of their faculty members. Such organizations also are referred to as academic institutions.

PI Limit:

Alliance (including the B2B) and BD: To promote institutional commitments to increase the quality and quantity of under-represented minorities in STEM disciplines, the President or Provost of the lead institution should serve as the Principal Investigator. A full explanation should be provided for a PI designation in variance with this requirement. Co-principal investigators from partner institutions may be designated, as appropriate, for the project.

Broadening Participation Research in STEM Education: Eligible PI/co-PI(s) for proposals applying for educational research or evaluation support should be the individual conducting or responsible for the research or evaluation project. Other potential co-Principal Investigators include collaborators on the research project. At least one of the PI's must have experience in educational research.

Limit on Number of Proposals per Organization:

Alliances (including B2B) and BD: 1

Broadening Participation Research in STEM Education: No limit.

Limit on Number of Proposals per PI:

Alliances (including B2B): 1

Bridge to the Doctorate: 1

Broadening Participation Research in STEM Education: No limit

**Eligibility
information for
institutions/PIs
submitting
proposals**



Parts of a Proposal

Parts of an NSF Proposal

Cover Sheet

Many of the boxes on the cover sheet are electronically prefilled as part of the FastLane login process.

| COVER SHEET FOR PROPOSAL TO THE NATIONAL SCIENCE FOUNDATION | | | | | |
|--|------------------|--|---|---|---------------------|
| PROGRAM ANNOUNCEMENT/SOLICITATION NO./CLOSING DATE (If not in response to a program announcement/solicitation enter NSF 14-1) | | | | | FOR NSF USE ONLY |
| NSF 14-1 | | | | | NSF PROPOSAL NUMBER |
| FOR CONSIDERATION BY NSF ORGANIZATION UNIT(S) (Indicate the most specific unit known, i.e. program, division, etc.) | | | | | 1509402 |
| PHY - ASTROPHYSICS & COSMOLOGY THEOR | | | | | |
| DATE RECEIVED | NUMBER OF COPIES | DIVISION ASSIGNED | FUND CODE | DUNS# (Data Universal Numbering System) | FILE LOCATION |
| 11/03/2014 | 1 | 03010000 PHY | 1288 | 084184116521 | 11/03/2014 8:29pm |
| EMPLOYER IDENTIFICATION NUMBER (EIN) OR TAXPAYER IDENTIFICATION NUMBER (TIN) | | SHOW PREVIOUS AWARD NO. IF THIS IS <input type="checkbox"/> A RENEWAL <input type="checkbox"/> AN ACCOMPLISHMENT-BASED RENEWAL | | IS THIS PROPOSAL BEING SUBMITTED TO ANOTHER FEDERAL AGENCY? YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> IF YES, LIST ACRONYM(S) | |
| NAME OF ORGANIZATION TO WHICH AWARD SHOULD BE MADE NSF | | | ADDRESS OF Awardee ORGANIZATION, INCLUDING 9 DIGIT ZIP CODE Arlington, VA 222000000 | | |
| AWARDEE ORGANIZATION CODE (IF KNOWN) 4102852000 | | | US | | |
| NAME OF PRIMARY PLACE OF PERF | | | ADDRESS OF PRIMARY PLACE OF PERF, INCLUDING 9 DIGIT ZIP CODE | | |
| IS Awardee ORGANIZATION (Check All That Apply) (See GPG II.C For Definitions) | | | | | |
| <input type="checkbox"/> SMALL BUSINESS <input type="checkbox"/> MINORITY BUSINESS <input type="checkbox"/> IF THIS IS A PRELIMINARY PROPOSAL THEN CHECK HERE <input type="checkbox"/> FOR-PROFIT ORGANIZATION <input type="checkbox"/> WOMAN-OWNED BUSINESS | | | | | |
| TITLE OF PROPOSED PROJECT International Conference Cosmical Magnetic Fields | | | | | |
| REQUESTED AMOUNT \$ 30,000 | | PROPOSED DURATION (1-60 MONTHS) 0 months | | REQUESTED STARTING DATE | |
| SHOW RELATED PRELIMINARY PROPOSAL NO. IF APPLICABLE | | | | | |
| THIS PROPOSAL INCLUDES ANY OF THE ITEMS LISTED BELOW | | | | | |
| <input type="checkbox"/> BEGINNING INVESTIGATOR (GPG I.G.2) <input type="checkbox"/> DISCLOSURE OF LOBBYING ACTIVITIES (GPG II.C.1.e) <input type="checkbox"/> PROPRIETARY & PRIVILEGED INFORMATION (GPG I.D, II.C.1.d) <input type="checkbox"/> HISTORIC PLACES (GPG II.C.2.i) <input type="checkbox"/> VERTEBRATE ANIMALS (GPG II.D.6) IACUC App. Date _____ <input type="checkbox"/> PHS Animal Welfare Assurance Number _____ <input checked="" type="checkbox"/> FUNDING MECHANISM Conference, Symposium, Workshop | | | | | |
| <input type="checkbox"/> HUMAN SUBJECTS (GPG II.D.7) Human Subjects Assurance Number _____ Exemption Subsection _____ or IRB App. Date _____ <input type="checkbox"/> INTERNATIONAL ACTIVITIES: COUNTRY/COUNTRIES INVOLVED (GPG II.C.2.i) _____ <input checked="" type="checkbox"/> COLLABORATIVE STATUS Not a collaborative proposal | | | | | |
| PI/DP DEPARTMENT Physics | | PI/DP POSTAL ADDRESS 4201 WILSON BLVD | | | |
| PI/DP FAX NUMBER | | ARLINGTON, VA 222300000 | | | |
| | | United States | | | |
| NAMES (TYPED) | High Degree | Yr of Degree | Telephone Number | Email Address | |
| PI/DP NAME Terry Demo | DSc | 1999 | 703-292-9000 | td@nsf.gov | |
| CO-PI/DP | | | | | |
| CO-PI/DP | | | | | |
| CO-PI/DP | | | | | |
| CO-PI/DP | | | | | |

Parts of an NSF Proposal

Project Summary Requirements:

Overview

Statement on Intellectual Merit

Statement of Broader Impacts

Special characters (e.g., formulas) may be uploaded as a PDF

Project Description Addresses:

What you want to do

Why you want to do it

How you plan to do it

How you measure success

What are the benefits

**A separate section, *Broader Impacts of the Proposal Work*,
must be completed**

Parts of an NSF Proposal

Results from Prior NSF Support

References Cited

Biographical Sketches

Budget

Budgetary Guidelines

Amounts should be:

- **Realistic and reasonable**
- **Well-justified and should establish need**
- **Consistent with program guidelines in the solicitation, GPG, and in the Award and Administration Guide (AAG)**

Eligible costs consist of:

- **Personnel**
- **Equipment**
- **Travel**
- **Participant support**
- **Other direct costs**
(e.g., subawards, consultant services, computer services, and publications costs)
- **Indirect costs**
(as appropriate)

NSF Cost Sharing Policy

- Inclusion of *voluntary committed* cost sharing is prohibited in the budget of solicited & unsolicited proposals.
- Organizations may, at their own discretion, continue to contribute voluntary uncommitted cost sharing to NSF-sponsored projects as part of the section for Facilities, Equipment, and Other Resources.

Sections of an NSF Proposal

Facilities, Equipment, and Other Resources

Used to assess the adequacy of the organizational resources available to perform the effort proposed. Should not contain quantifiable financial information.

Current and Pending Support

This section of the proposal requires reporting on all current and pending support for ongoing projects and proposals from any funding source.



Special Information and Supplementary Documentation

- Letters of support versus letters of commitment
- Postdoctoral mentoring plans
- Data management plans
- You should alert NSF officials to unusual circumstances that require special handling (i.e. proprietary information)
- Solicitations may specify what is and is not allowed to be submitted

Mentoring for Postdoctoral Researchers

- Explicit description of the mentoring activities
- Must include a mentoring plan as a supplementary document (maximum one-page)
- For collaborative proposals, lead organization must submit a single mentoring plan for all postdoctoral researchers supported under the entire project.



Data Management Plan Requirements

Requirements by Directorate, Office, Division, Program, or other NSF Unit

Links to data management requirements and plans relevant to specific Directorates, Offices, Divisions, Programs, or other NSF units, are provided below. If guidance specific to the program is not provided, then the requirements established in [Grant Proposal Guide, Chapter II.C.2.i](#) apply.

Please note that if a specific program solicitation provides guidance on preparation of data management plans, such guidance must be followed.

- Engineering Directorate (ENG)
 - [Directorate-wide Guidance](#)
- Geological Sciences Directorate (GEO)
 - [Division of Earth Sciences](#)
 - [Integrated Ocean Drilling Program](#)
 - [Division of Ocean Sciences](#)
- Mathematical and Physical Sciences Directorate (MPS)
 - [Division of Astronomical Sciences](#)
 - [Division of Chemistry](#)
 - [Division of Materials Research](#)
 - [Division of Mathematical Sciences](#)
 - [Division of Physics](#)
- Social, Behavioral and Economic Sciences Directorate (SBE)
 - [Directorate-wide Guidance](#)

[Data Management & Sharing Frequently Asked Questions \(FAQs\)](#) - updated November 30, 2010

**Requirements
may vary by
Directorate or
Office**

nsf.gov/bfa/dias/policy/dmp.jsp

Questions?



NSF's Crosscutting Programs



What Is a Crosscutting Program?

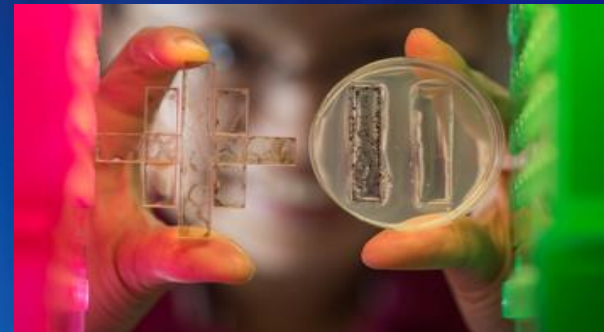
NSF has many programs that are sponsored by more than one NSF unit.... cutting across the Foundation in different ways.

....NSF also participates in many programs with other U.S. government agencies.



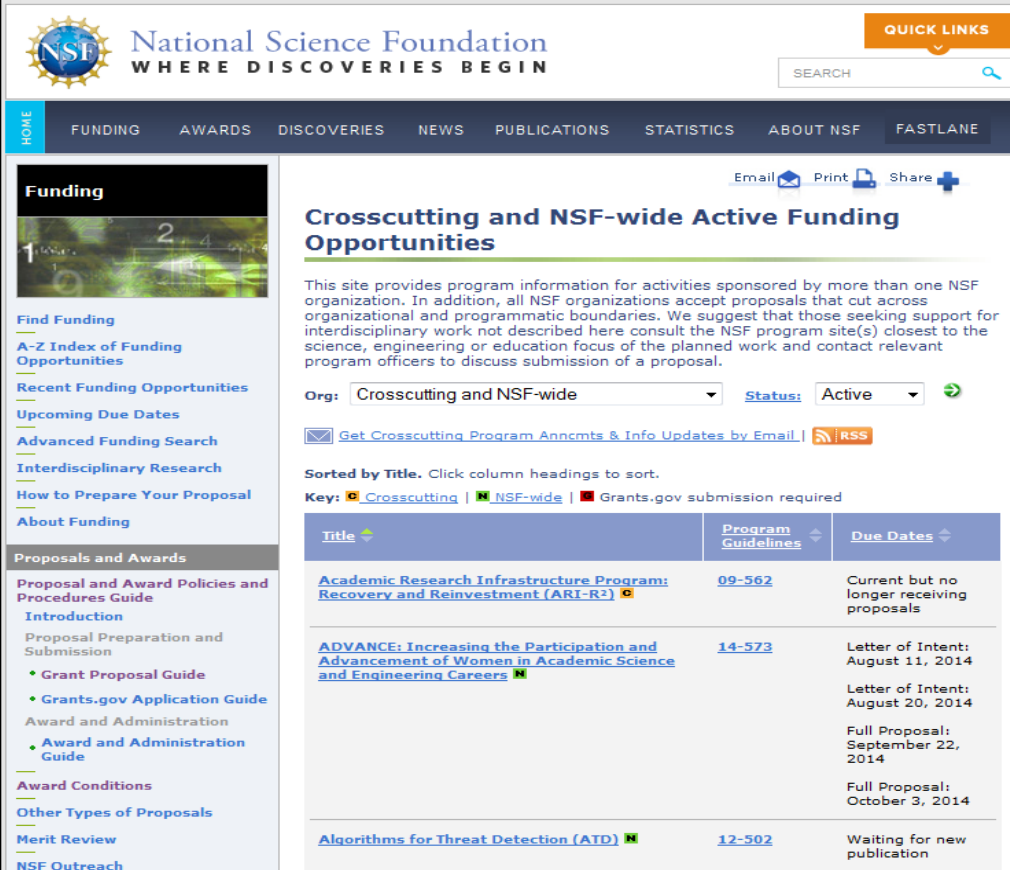
Types of Crosscutting Activities

- International
- Interdisciplinary research – theme-based (e.g., Designing Materials, Hazards and Disasters)
- People-oriented (e.g., ADVANCE, CAREER, REU, Work-Life Balance)
- Infrastructure (e.g., MRI)
- Translational (ICorps, SBIR)
- Institutional, Centers (e.g., IUCRC, STC)



Find Funding for Crosscutting Programs

Go to: www.nsf.gov/funding/pgm.list.jsp?type=xcut



National Science Foundation
WHERE DISCOVERIES BEGIN

QUICK LINKS

SEARCH

HOME FUNDING AWARDS DISCOVERIES NEWS PUBLICATIONS STATISTICS ABOUT NSF FASTLANE

Funding

Find Funding
A-Z Index of Funding Opportunities
Recent Funding Opportunities
Upcoming Due Dates
Advanced Funding Search
Interdisciplinary Research
How to Prepare Your Proposal
About Funding

Proposals and Awards
Proposal and Award Policies and Procedures Guide
Introduction
Proposal Preparation and Submission
• Grant Proposal Guide
• Grants.gov Application Guide
Award and Administration
• Award and Administration Guide
Award Conditions
Other Types of Proposals
Merit Review
NSF Outreach

Email Print Share

Crosscutting and NSF-wide Active Funding Opportunities

This site provides program information for activities sponsored by more than one NSF organization. In addition, all NSF organizations accept proposals that cut across organizational and programmatic boundaries. We suggest that those seeking support for interdisciplinary work not described here consult the NSF program site(s) closest to the science, engineering or education focus of the planned work and contact relevant program officers to discuss submission of a proposal.

Org: Status:

☒ Get Crosscutting Program Announcements & Info Updates by Email | RSS

Sorted by Title. Click column headings to sort.

Key: Crosscutting | NSF-wide | Grants.gov submission required

| Title | Program Guidelines | Due Dates |
|--|------------------------|---|
| Academic Research Infrastructure Program: Recovery and Reinvestment (ARI-R2) | 09-562 | Current but no longer receiving proposals |
| ADVANCE: Increasing the Participation and Advancement of Women in Academic Science and Engineering Careers | 14-573 | Letter of Intent: August 11, 2014 Letter of Intent: August 20, 2014 Full Proposal: September 22, 2014 Full Proposal: October 3, 2014 |
| Algorithms for Threat Detection (ATD) | 12-502 | Waiting for new publication |

RAPID/ EAGER

Grants for Rapid Response Research (RAPID)

Severe Urgency

Up to \$200K/one year

Brief project description

Internal review

EARly-concept Grants for Exploratory Research (EAGER)

Potentially transformative

Up to \$300K/one year

"High risk-high payoff"

Internal review

Rare but occasional external review



NSF Research Traineeship (NRT) Program

Encouraging the development and implementation of bold, new, potentially transformative, and scalable models for STEM graduate training

Traineeship Track

\$3,000,000 for up to 5 years



Innovations in Graduate Education (IGE) Track

\$300,000 - \$500,000 for 2-3 years



Application Deadline : 5/6/2015

International - A Crosscutting Portfolio

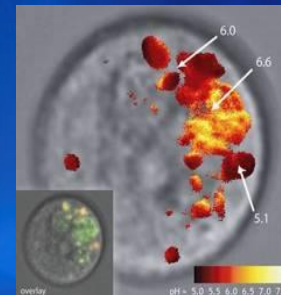
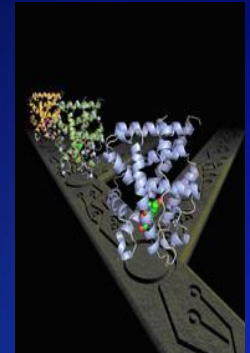
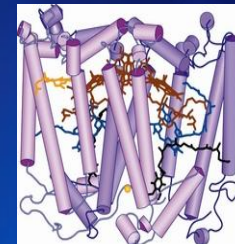
International activities at NSF

- Span all NSF Directorates and Offices
- Globalize NSF research and education
- Strengthen partnerships with foreign counterpart funders
- Involve cooperation with other U.S. government agencies, private foundations

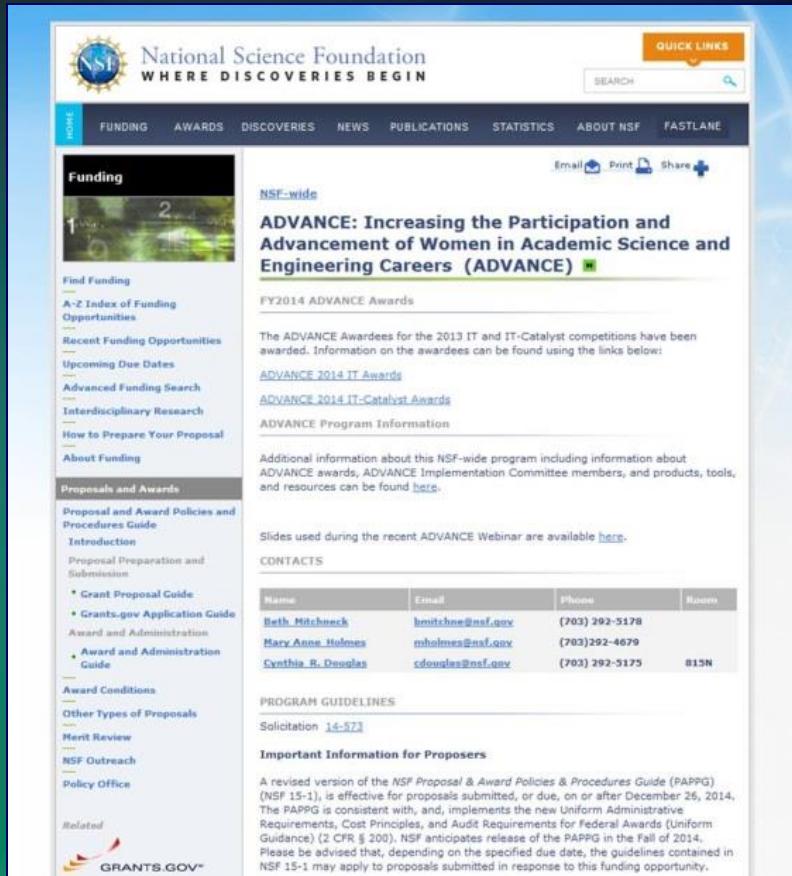


Examples of Support for International Activities

- Partnerships for International Research and Education (PIRE)
- Science Across Virtual Institutes (SAVI)
- Partnerships for Enhanced Engagement in Research (PEER) – with USAID
- International Research Experiences for Students (IRES)
- Graduate Research Opportunities Worldwide (GROW)
- East Asia Pacific Summer Institutes (EAPSI)
- (International) Postdoctoral Research Fellowship Program



ADVANCE: Increasing the Participation and Advancement of Women in Academic Science and Engineering Careers



The screenshot shows the NSF ADVANCE website. The header includes the NSF logo and the text "National Science Foundation WHERE DISCOVERIES BEGIN". A navigation bar contains links for FUNDING, AWARDS, DISCOVERIES, NEWS, PUBLICATIONS, STATISTICS, ABOUT NSF, and FASTLANE. A search bar is located in the top right. The main content area is titled "Funding" and features a "NSF-wide" section for "ADVANCE: Increasing the Participation and Advancement of Women in Academic Science and Engineering Careers (ADVANCE)". Below this, there is a section for "FY2014 ADVANCE Awards" with a link to "ADVANCE 2014 IT Awards". A table of contacts is provided, listing names, email addresses, phone numbers, and room numbers. The table includes three rows of contact information. Below the table, there is a section for "PROGRAM GUIDELINES" with a link to "Solicitation 14-573". The footer includes the "GRANTS.GOV" logo.

| Name | Email | Phone | Room |
|--------------------|--------------------|----------------|------|
| Beth Mitschnee | bmitschnee@nsf.gov | (703) 292-5178 | |
| Mary Anne Holmes | mholmes@nsf.gov | (703) 292-4679 | |
| Cynthia R. Douglas | cdouglas@nsf.gov | (703) 292-5175 | 815N |

Goals:

- Systemic approaches to increase the representation and advancement of women in academic STEM careers.
- Contribute to and inform the general knowledge base on gender equity in the academic STEM disciplines.

Graduate Research Fellowship Program



Goals:

- Select, recognize, and financially support individuals with the demonstrated potential to be high achieving scientists and engineers, early in their careers.
- Broaden participation in science and engineering of underrepresented groups, including women, minorities, persons with disabilities, and veterans





5 Year Award = \$138,000

\$34,000/year for 3 years +

+

**\$12,000 Educational allowance
to institution**

Professional Development Opportunities:

GROW: International Research

GRIP: Internships

Supercomputer access: XSEDE

Career Life Balance (family leave)



RESOURCES:

Solicitation and links

www.nsf.gov/grfp

NSF GRFP FastLane Website

www.fastlane.nsf.gov/grfp

Application, guides, announcements

GRFP Website, www.nsfgrfp.org

Current & former Fellows

866-NSF-GRFP, info@nsfgrfp.org



Major Research Instrumentation (MRI)

Goals:

- Support acquisition of major state-of-the-art instrumentation
- Foster development of the next generation of major instrumentation
- Integrate research with education
- Use, advance, and/or expand the Nation's cyber-infrastructure and/or high performance computing capability
- Promote academic and private sector instrument development partnerships

The screenshot shows the NSF website with the following content:

- Header:** National Science Foundation, WHERE DISCOVERIES BEGIN, QUICK LINKS, SEARCH.
- Navigation:** HOME, FUNDING, AWARDS, DISCOVERIES, NEWS, PUBLICATIONS, STATISTICS, ABOUT NSF, FASTLANE.
- Funding Section:** Find Funding, A-Z Index of Funding Opportunities, Recent Funding Opportunities, Upcoming Due Dates, Advanced Funding Search, Interdisciplinary Research, How to Prepare Your Proposal, About Funding.
- Proposals and Awards Section:** Proposal and Award Policies and Procedures Guide, Introduction, Proposal Preparation and Submission, Grant Proposal Guide, Grants.gov Application Guide, Award and Administration, Award and Administration Guide, Award Conditions, Other Types of Proposals, Merit Review, NSF Outreach.
- Major Research Instrumentation Program (MRI) Section:**
 - NSF-wide**
 - Major Research Instrumentation Program (MRI)**
 - MRI ANNOUNCEMENTS**
 - FREQUENTLY ASKED QUESTIONS POSTED**
FAQs have been added for MRI Solicitation 11-503. To view the FAQs page click [here](#).
 - CONTACTS**

| Name | Email | Phone | Room |
|---------------------|--|----------------|------|
| Dr. Randy L. Phelps | mri@nsf.gov | (703) 292-8040 | |

Additional contact information for NSF's Major Research Instrumentation Program is as follows:

Office of Integrative Activities
Major Research Instrumentation Program
National Science Foundation, Room 935
4201 Wilson Boulevard
Arlington, VA 22230
(703) 292-8040
E-Mail: mri@nsf.gov
Website: <http://www.nsf.gov/od/oia/programs/mri>
 - PROGRAM GUIDELINES**
Solicitation [13-517](#)
 - Important Notice to Proposers**
A revised version of the NSF Proposal & Award Policies & Procedures Guide (PAPPG), NSF 13-1, was issued on October 4, 2012 and is effective for proposals submitted, or due, on or after January 14, 2013. Please be advised that, depending on the specified due date, the guidelines contained in NSF 13-1 may apply to proposals submitted in response to this funding opportunity.

Doctoral Dissertation Research Improvement Awards - DDRI

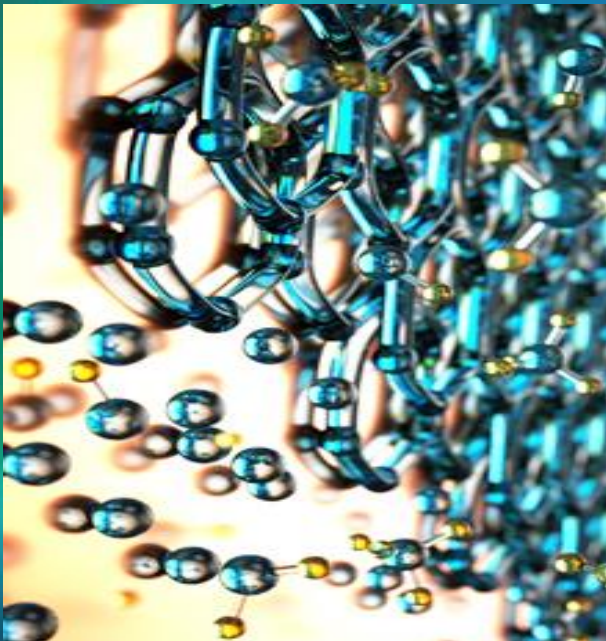


Grant Opportunities for Academic Liaison with Industry - GOALI

Promotes university-industry partnerships

Supplies project funds or fellowships/traineeships

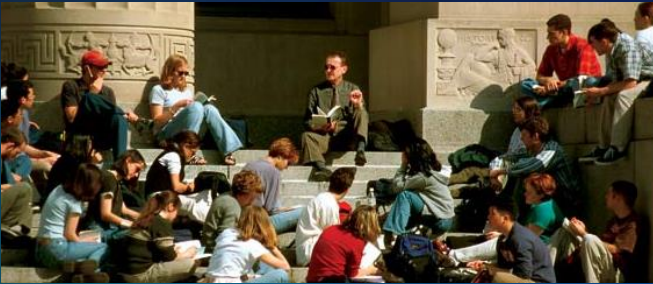
Supports eclectic mix of industry-university linkages



**Encourages Research that lies beyond that
which industry would normally fund solo**

Support for Undergraduates

RUI, ROA for PUIs



RUIs and ROAs support research by faculty members at PUIs.

PUIs = accredited institutions that award Associate's, Bachelor's, and/or Master's degrees but have not awarded > 20 Ph.D./D.Sci. degrees in all NSF-supported fields during the combined previous two academic years.

ALL NSF directorates evaluate and fund RUIs and ROAs

They are funded within R & E program allocations

Research Experiences for Undergraduates

REU Goals:

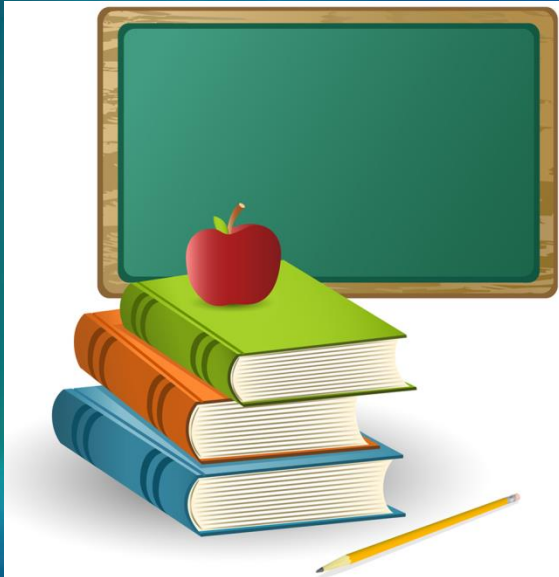
- Initiate and conduct projects that engage a number of undergraduate students in research.
- Involve in research students who might not otherwise have the opportunity, particularly those from academic institutions where research programs are limited.

The screenshot shows the NSF website with the header "National Science Foundation WHERE DISCOVERIES BEGIN". The main navigation bar includes links for HOME, FUNDING, AWARDS, DISCOVERIES, NEWS, PUBLICATIONS, STATISTICS, ABOUT NSF, and FASTLANE. A search bar is located in the top right corner. The left sidebar contains a "Funding" section with a "Find Funding" link and a list of links: A-Z Index of Funding Opportunities, Recent Funding Opportunities, Upcoming Due Dates, Advanced Funding Search, Interdisciplinary Research, How to Prepare Your Proposal, and About Funding. Below this is a "Proposals and Awards" section with links for Proposal and Award Policies and Procedures Guide, Introduction, Proposal Preparation and Submission, Grant Proposal Guide, and Grants.gov Application Guide. The main content area features a "NSF-wide" link, the title "Research Experiences for Undergraduates (REU)", and a "NOTE ON THE PROPOSAL DEADLINE FOR REU SITES". The note states: "Two due dates are listed for REU Site proposals each year. The May deadline applies only to REU Site proposals that require access to Antarctica, which must be submitted to one of the Antarctic Sciences Division (ANT) research programs in the Office of Polar Programs (OPP). The fall deadline (which is September 12 in 2012, and the fourth Wednesday in August in 2013 and beyond) applies to all other REU Site proposals." Below the note are sections for "CONTACTS" (NSF REU Site Contacts: http://www.nsf.gov/crssprgm/reu/reu_contacts.jsp), "PROGRAM GUIDELINES", "Solicitation 13-542", and "DUE DATES". The "DUE DATES" section lists two deadlines: "Full Proposal Deadline Date: August 27, 2014" and "Full Proposal Deadline Date: May 22, 2015".

Research Experiences for Teachers

RET Goals:

Enable K-12 teachers and community college faculty to engage in STEM research and then adapt knowledge into their teaching



- RET Sites and Supplements
- May be included in REU proposals
- Check Directorates for specific mechanisms

Questions?



Lunch



The Merit Review Process



Video

NSF's Proposal & Award Process Timeline

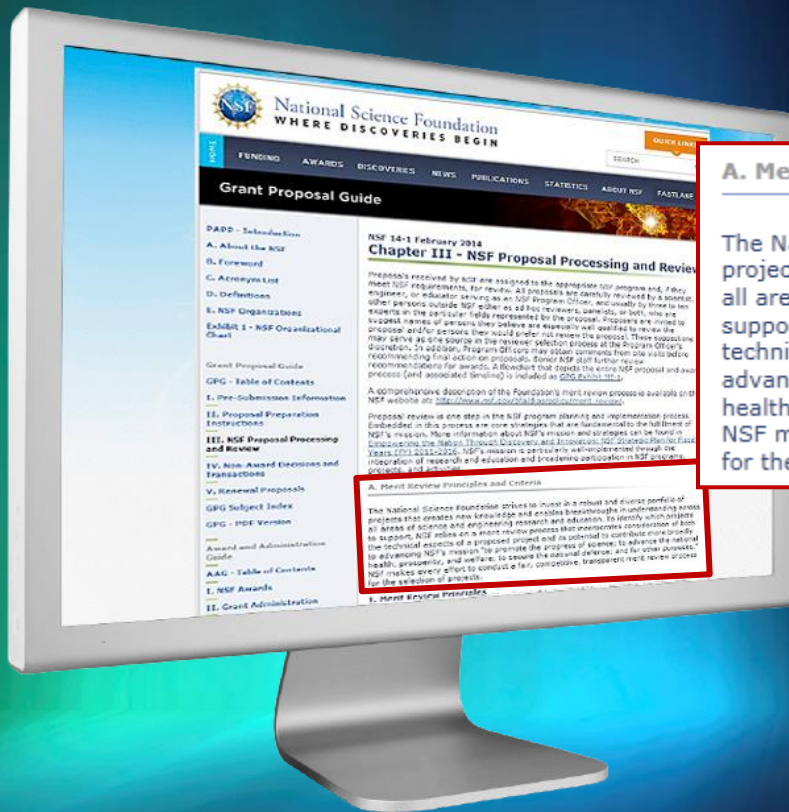
Black Box?

When Preparing Proposals

- Read the funding opportunity; ask a Program Officer for clarifications if needed
- Address all the proposal review criteria
- Understand the NSF merit review process
- Avoid omissions and mistakes
- Check your proposal to verify that it is complete!
- Double Check that the proposal NSF receives is the one you intended to send

Merit Review Guiding Principles & Criteria

The Grant Proposal Guide (GPG) contains a description of the Merit Review Criteria



A. Merit Review Principles and Criteria

The National Science Foundation strives to invest in a robust and diverse portfolio of projects that creates new knowledge and enables breakthroughs in understanding across all areas of science and engineering research and education. To identify which projects to support, NSF relies on a merit review process that incorporates consideration of both the technical aspects of a proposed project and its potential to contribute more broadly to advancing NSF's mission "to promote the progress of science; to advance the national health, prosperity, and welfare; to secure the national defense; and for other purposes." NSF makes every effort to conduct a fair, competitive, transparent merit review process for the selection of projects.

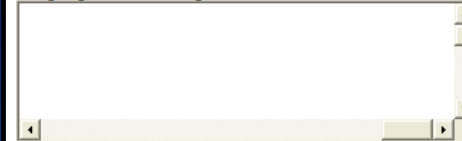
Review Format in FastLane

- Reviewers provide feedback to NSF based on the Review Criteria and the Review Elements
- Review Criteria and Elements are available as reviewers provide feedback

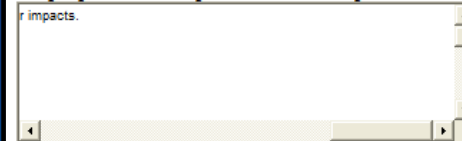
The following elements should be considered in the review for both criteria:

1. What is the potential for the proposed activity to
 - a. advance knowledge and understanding within its own field or across different fields (Intellectual Merit); and
 - b. benefit society or advance desired societal outcomes (Broader Impacts)?
2. To what extent do the proposed activities suggest and explore creative, original, or potentially transformative concepts?
3. Is the plan for carrying out the proposed activities well-reasoned, well-organized, and based on a sound rationale? Does the plan incorporate a mechanism to assess success?
4. How well qualified is the individual, team, or institution to conduct the proposed activities?
5. Are there adequate resources available to the PI (either at the home institution or through collaborations) to carry out the proposed activities?

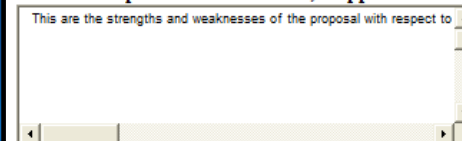
In the context of the five review elements, please evaluate the strengths and weaknesses of the proposal with respect to intellectual merit.



In the context of the five review elements, please evaluate the strengths and weaknesses of the proposal with respect to broader impacts.



Please evaluate the strengths and weaknesses of the proposal with respect to any additional solicitation-specific review criteria, if applicable.



9 Reasons for Proposals to be Returned Without Review (RWR)

1. Does not meet NSF proposal preparation requirements
2. It is inappropriate for NSF funding
3. Insufficient lead time
4. Received a “Not invited” response to the submission after a preliminary proposal
5. Duplicative or substantially similar to a proposal already under consideration
6. Not responsive to the GPG or program announcement/solicitation
7. Does not meet an announced proposal deadline date and time
8. Proposal was previously reviewed and declined and has not been substantially revised
9. Duplicates another proposal that was already awarded



Types of Reviews

- Ad Hoc
 - Proposals are sent out for review
- Panel
 - Face-to Face sessions conducted with reviewers. Held at NSF, or virtually via assistive technologies such as WebEx or BlueJeans
- Combination
 - Some proposals may undergo supplemental ad hoc reviews before or after a panel review
- Internal
 - Reviewed by NSF Program Officers



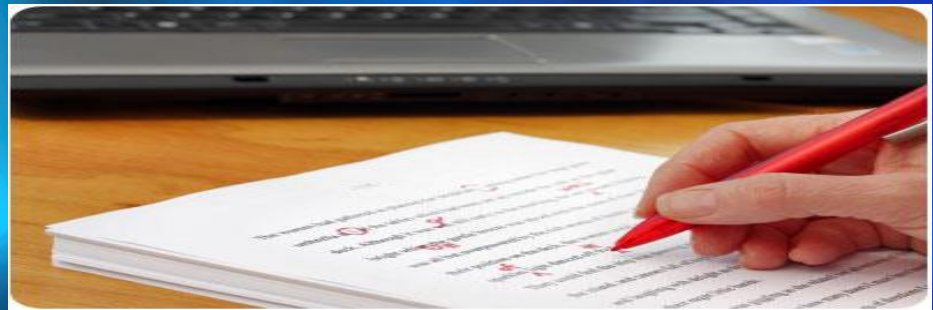
How are Reviewers Selected?

- **Three or more external reviewers per proposal are selected**
- **Types of Reviewers Recruited**
 - Specific content expertise
 - General science or education expertise
- **Sources of Reviewers**
 - Former reviewers
 - Program Officer's knowledge of the research area
 - References listed in proposal
 - Recent professional society programs
 - S&E journal articles related to the proposal
 - Reviewer recommendations included in proposal



What is the Role of the Reviewer?

- **Review all proposal material and consider**
 - The two NSF merit review criteria and any program specific criteria.
 - Adequacy of the proposed project plan- including the budget, resources, and timeline.
 - Priorities of the scientific field and of the NSF program
 - Potential risks and benefits of the project
- **Make independent written comments on the quality of the proposal content.**



What is the Role of the Review Panel?

- Discuss the merits of the proposal with the other panelists
- Write a summary based on that discussion
- Provide some indication of the relative merits of different proposals considered



Why Serve on an NSF Panel?

- Gain first-hand knowledge of the merit review process
- Learn about common problems with proposals



- Discover proposal writing strategies
- Meet colleagues and NSF Program Officers managing the programs related to your research

How Do I Become a Reviewer?

Contact the NSF Program Officer(s) of the program(s) that fit your expertise

- Introduce yourself as a strong potential reviewer based on your research experience
- Offer to send a 2-page CV with current contact information
- Stay in touch if you don't hear back right away



Conflicts of Interest (COI)

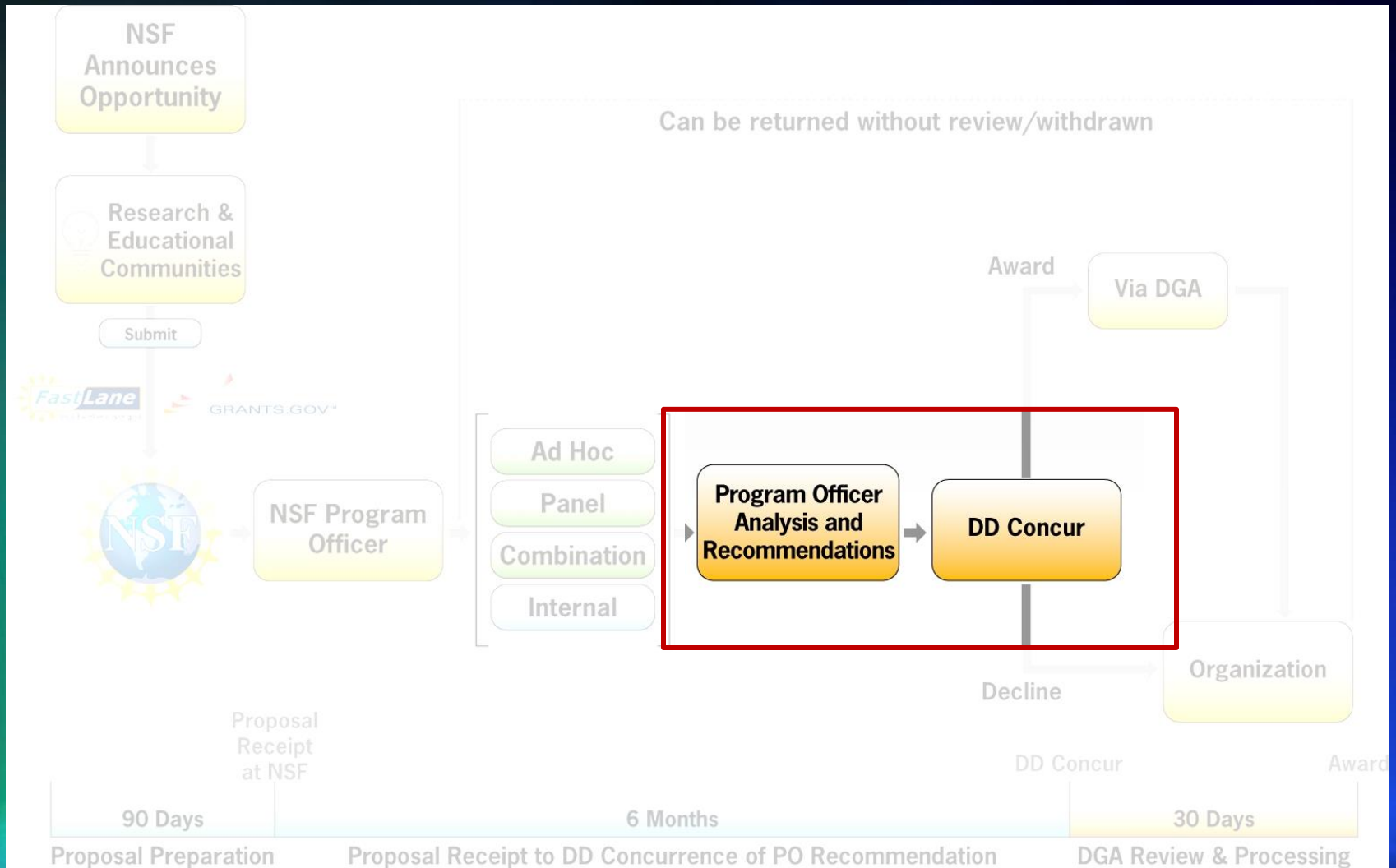
What is a COI?

How we address conflict of interest

- **NSF checks and avoids COIs in the review process**
 - **Institutional COIs**
 - **Personal COIs**



Proposal Review and Processing



Funding Decisions

Reviews are Advisory to NSF

- **The merit review process provides:**
 - Review of the proposal and a recommendation on funding.
 - Feedback (strengths and weaknesses) to the proposers.
- **NSF Program Officers make funding recommendations guided by program goals and portfolio considerations.**
- **NSF Division Directors either concur or reject the Program Officers' funding recommendations.**

Feedback from Merit Review

- Reviewer ratings (such as: E, V, G, F, P)
- Analysis of how well proposal addresses both review criteria: Intellectual Merit and Broader Impacts
- Proposal strengths and weaknesses
- Reasons for decline (if applicable)
- If you have any questions, contact the cognizant Program Officer.



Documentation from Merit Review

- Verbatim copies of individual reviews, excluding reviewer identities
- Panel summary or summaries (if panel review was used)
- Context statement (usually)
- Program Officer to Principal Investigator comments (formal or informal, written, email or verbal) as necessary to explain a decision



Examples of Reasons for Declines

- **Not considered competitive based on merit review criteria and program office concurrence**
- **Flaws or issues identified by the Program Officer**
- **Funds were not adequate to fund all competitive proposals**



Revisions and Resubmissions

- Do the reviewers and the NSF Program Officer identify significant strengths in your proposal?
- Can you address the identified weaknesses?
- Can the proposal be **significantly** revised?
- Are there other ways your colleagues or you think a resubmission can be strengthened?



Questions?

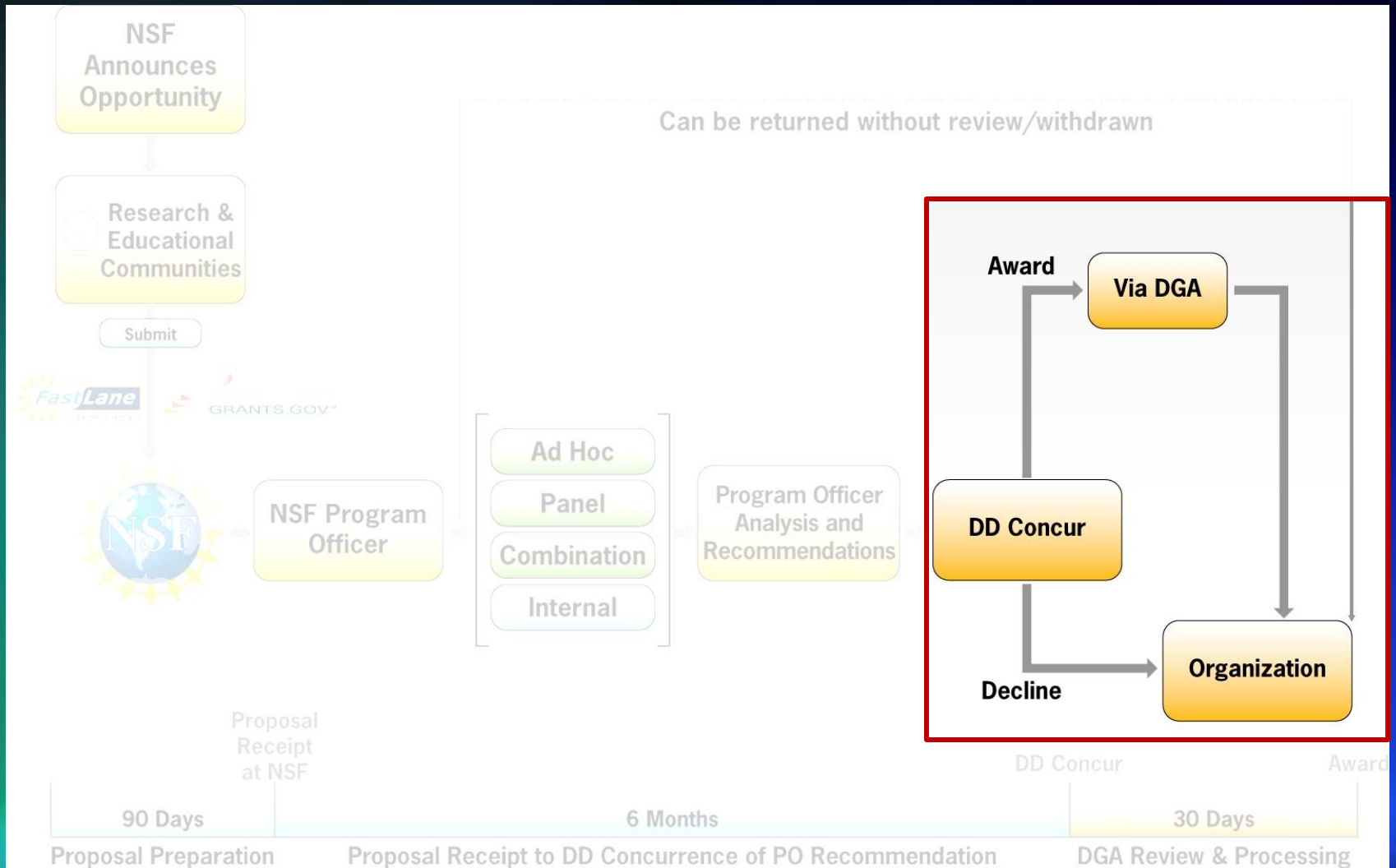
Contact your cognizant Program Officer!

Possible Considerations for Funding a Competitive Proposal

- Addresses all review criteria
- Likely high impact
- Broadening participation
- Educational impact
- Impact on institution/state
- Special programmatic considerations (e.g. CAREER/RUI/EPSCoR)
- Other support for PI
- “Launching” versus “Maintaining”
- Portfolio balance

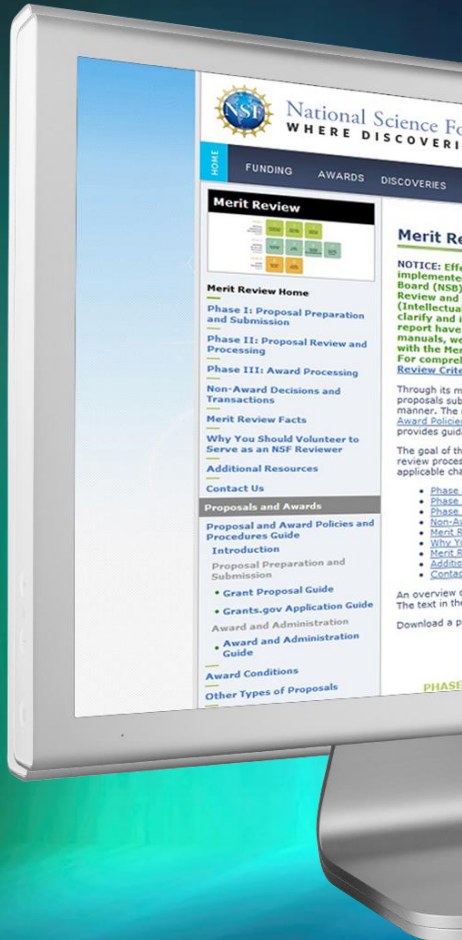


Proposal Review and Processing



For More Information

Go to NSF's Home Page (<http://www.nsf.gov>)



HOME FUNDING AWARDS DISCOVERIES

Merit Review

NOTICE: Effective January 14, 2013, the National Science Foundation implemented revised merit review criteria based on the National Science Board (NSB) report, National Science Foundation's Merit Review Criteria: Review and Revisions. While the two merit review criteria remain unchanged (Intellectual Merit and Broader Impacts), guidance has been provided to clarify and improve the function of the criteria. Revisions based on the NSB report have been incorporated into the Foundation's policies and procedures manuals, websites, and systems. Proposers should familiarize themselves with the Merit Review Principles and Criteria described in [GPG Chapter III.A](#). For comprehensive outreach and training materials visit the [Revised Merit Review Criteria Resource site](#).

Through its merit review process, the National Science Foundation (NSF) ensures that proposals submitted are reviewed in a fair, competitive, transparent, and in-depth manner. The merit review process is described in detail in Part I of the NSF [Proposal & Award Policies & Procedures Guide \(PAPPG\)](#); the [Grant Proposal Guide \(GPG\)](#). The GPG provides guidance for the preparation and submission of proposals to NSF.

The goal of this Merit Review website is to help you better understand the NSF merit review process as well as identify resources for additional information (including applicable chapters in the GPG). Sections of this website include:

- [Phase I: Proposal Preparation and Submission](#)
- [Phase II: Proposal Review and Processing](#)
- [Phase III: Award Processing](#)
- [Non-Award Decisions and Transactions](#)
- [Merit Review Facts](#)
- [Why You Should Volunteer to Serve As An NSF Reviewer](#)
- [Additional Resources](#)
- [Contact Us](#)

Proposals and Awards

Proposal and Award Policies and Procedures Guide

Introduction

Proposal Preparation and Submission

- [Grant Proposal Guide](#)

Ask Early, Ask Often!

Contact the cognizant Program Officer



Faculty Early Career Development program (CAREER)



CAREER Awards

Solicitation 15-555

Due Dates:

| | |
|---------------|----------------|
| July 21, 2015 | BIO, CISE, EHR |
| July 22, 2015 | ENG |
| July 23, 2015 | GEO, MPS, SBE |

CAREER Awards

Foundation wide
Supports junior faculty
Research and education integration
PECASE eligibility



CAREER Awards

Stable support for 5 years

> \$400K – CISE, EHR, MPS, SBE

> \$500K - ENG, BIO, GEO/PLR



CAREER Eligible Investigators Must:

Hold PhD (by proposal deadline)

**Be employed in a tenure-track (or equivalent)
position at an eligible institution as an
Assistant Professor (until Oct 1st following
deadline)**



An Eligible Institution Must be:

An academic institution in the U.S., its territories or possessions, and the Commonwealth of Puerto Rico that award degrees in fields supported by NSF.



An eligible institution may also be:



Non-profit, non-degree-granting (e.g. a museum, observatory or lab) if the eligibility requirements of the PI are satisfied.

NSF encourages proposals from different institutional types, including minority serving and undergraduate institutions

CAREER Eligible Investigators May NOT:



- Receive tenure before Oct 1st following proposal deadline
- Have previously received a CAREER award
- Have had more than two CAREER proposals reviewed
- Be an untenured associate professor

CAREER Varies across NSF

- Number of submitted CAREER proposals
- Review and Funding methods
- Other Proposals with which CAREERs compete



NSF CAREER
Coordinating Committee
Sets NSF-wide goals

CAREER Proposals

Contact program manager liaison* and ask about:

- **Expectations for scope of research and education**
- **Assessment of 2 page departmental letter**
- **Funding rate trend for regular proposals in the program of interest**

*** see: <http://www.nsf.gov/crssprgm/career/contacts.jsp>**

Are CAREER Awards Right for you?

Yes, if:



Your proposed research is innovative, ambitious and within NSF's the purview of research and education supported

You have support from your department/organization, mentors.

You are at the right stage of your career.

CAREER Personnel and Budgets

YES

Consultants, subawards,
unpaid collaborators

Academic year buyouts
for teaching intensive
institutions

NO

Co-PI, senior personnel



CAREER Departmental 2 Page Letter

- **Statement of PI CAREER program eligibility**
- **Support for PI's s proposed research and education activities**
- **Description of how the PIs career goals and responsibilities mesh with that of the organization and department**
- **Commitment to support professional development and mentoring of the PI**
- **NOT a letter of recommendation or endorsement of the PI or the research project**

CAREER Awards Urban Myths:

“You cannot apply because you have another NSF award...”

“It is an entry program, so you must first apply to CAREER...”

“I need to see a successful proposal to write a successful proposal...”

“You have no chance, if you are not from a research intensive institution...”

“The education component does not matter...”

“I read on the web that to succeed, I have to...”

“CAREER proposals are more portable
than other NSF funding.”



Traits of a Successful CAREER Proposal



High quality -- This is a highly competitive program!

Matches disciplinary program expectations

**Includes an appropriate scope of activities for a 5-year plan,
not one's whole life!**

**Goes outside the education box of regular research proposals
in the field**

**Strikes a balance between doable research activities and more
risky pursuits**

PECASE:

Presidential Early Career Awards for Science and Engineering

April 18, 2014



CAREER Awards Resources:

Program Solicitation - NSF 15-555

Frequently Asked Questions - NSF 15-057

CAREER Directorate/Division Contacts

<http://www.nsf.gov/crssprgm/career/contacts.jsp>

Links to recent CAREER and PECASE awards

Deadlines for 2015

- July , 2015 - BIO, CISE, EHR**
- July 22, 2015 - ENG**
- July 23, 2015 - GEO, MPS, SBE**

Questions?



Break



Directorate Sessions



**Thank you for
Attending!**



**Please Complete
Your Evaluation!**